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How does crowdfunding work? Understanding the process through its activity

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A thesis submitted for the degree of
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Abstract

Crowdfunding is a process featuring incremental financial donations from a ‘crowd’ of backers to help fund a project initiated by a creator. In recent years, crowdfunding has generated significant revenue as well as great interest from industry, government, and creative entrepreneurs. However, rate of successful funding for crowdfunding projects remains around 35% for global crowdfunding leader Kickstarter¹, and lower yet for other platforms.

The identified gap between crowdfunding growth and crowdfunding success rates prompts the overarching question driving this thesis: **how does crowdfunding work?** This question is explored and answered through the lens of activity, as activity is largely observable, is featured in every project, and has some degree of control for creators. Activity was uncovered using semi-structured interviews, online observation, and daily monitoring of four crowdfunding projects from pre- to post-funding.

By cataloguing the specifics of crowdfunding activity, this thesis reveals the breadth of activity common to crowdfunding projects: financial, non-financial, online, and offline. Further, in mapping activity along a timeline, five distinct periods of crowdfunding activity are identified, each with specific aims. Additionally, the relationships guiding activity are assessed through discussion of community within crowdfunding, accentuating both emotional and behavioural investment in a project.

The resulting insights are summarised into two categories of contributions. The first is the consolidation of elements of importance to crowdfunding. By making implicit features of crowdfunding explicit, this adds precision to an understanding of the crowdfunding process. The second is the identification of underlying principles and essential steps to crowdfunding, which can be used by project creators to maximise success. This thesis provides a broader understanding of crowdfunding, emphasising the extent to which successful projects engage stakeholder communities with financial and non-financial activity and outcomes over time, as well as across various sites.

¹ (<http://www.kickstarter.com/help/stats>).

Acknowledgments

For the last three years, a quote from a Commencement speech given by journalist Robert Krulwich has been stuck on a Post-It next to my desk: *“In every career, your job is to make and tell stories, of course. You will build a body of work, but you will also build a body of affection, with the people you’ve helped who’ve helped you back”*.

My PhD process has been characterised by this search for a story and, even more critically, by this reciprocity. I feel an enormous sense of gratitude for the golden constellation of people around me:

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Preface

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STIVER, A., BARROCA, L., MINOCHA, S., RICHARDS, M. & ROBERTS, D. (2015). Civic crowdfunding research: Challenges, opportunities, and future agenda. *New Media & Society*. 17 (2). p.249–271.

STIVER, A., BARROCA, L., PETRE, M., RICHARDS, M. & ROBERTS, D. (2015). *Civic crowdfunding: how do offline communities engage online?* In Proceedings of the British HCI Conference ACM 2015. Lincoln, July 2015. p.37–45.

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Chapter 1: Socio-economic context and crowdfunding research focus

1.1 Introduction

Crowdfunding has helped fund a great diversity of projects:

The production of a documentary on a misunderstood medical condition received funding from an international group of backers composed of those with the condition and their allies².

Two brothers with a new model for manufacturing socks presented their ideas online, offering discounted products to those making a financial contribution³.

A PhD student solicited funding to hire an assistant while conducting fieldwork abroad, sending postcards and circulating updates to all who donated⁴.

A local community group, in partnership with local government, funded the greening of a disused urban square and, through the process, brought in support from neighbours and local businesses⁵.

These are all examples of successful projects included in this thesis⁶.

Crowdfunding is an online process through which a project creator funds a project through incremental donations from a 'crowd' of backers. This process is often achieved by means of an online crowdfunding platform, and supplemented by social media and

² Canary in a Coal Mine (<https://www.kickstarter.com/projects/959776320/canary-in-a-coal-mine>).

³ XOAB socks (<https://www.kickstarter.com/projects/ricklevine/xoab-socks-done-right>).

⁴ Seahorses (<https://experiment.com/projects/searching-for-seahorses-sustainability>).

⁵ StevensonSquare projects (<https://www.spacehive.com/stevensonssquaregreenmakeover>).

⁶ Further details of all projects included in this thesis are available in Appendix 1 and 2.

other non-financial activity. Offline elements, such as promotional events, are also frequently present.

The type of crowdfunding explored through this research is reward-based crowdfunding, characterised by awarding a symbolic ‘reward’ to backers in return for their contribution. ‘Donation-based’ and ‘reward-based’ crowdfunding were once distinct terms; they are now positioned as hybrid terms by the UK Crowdfunding Association (2015). For simplicity, reward-based crowdfunding is used exclusively in this thesis.

Examples of reward-based crowdfunding platforms are Indiegogo and Kickstarter, established in 2008 and 2009 respectively. Since their establishment, growth of the field has been fast-paced in terms of revenue generated, types of projects, number of platforms, and geographic reach (Massolution, 2015). Despite this rapid growth, rate of successful funding for projects remains around 35% on Kickstarter⁷, and lower yet on other platforms, suggesting room for improvement in project execution. In response, this thesis uses the lens of crowdfunding activity to investigate:

...what makes crowdfunding *work*?

This question is answered using qualitative approaches that:

1. Catalogue the range of activity across crowdfunding;
2. Outline how these activities interact across time and crowdfunding stakeholders, and;
3. Assess implications for project success, focusing on suggestions for project creators in particular.

In answering this question, this thesis argues for a broader understanding of crowdfunding, beyond a means to secure funding. Further, by informing creator strategy through specific project knowledge, this research aims to help close the gap between the growth of the crowdfunding field and project success rates.

⁷ Kickstarter updates platform statistics daily: (<http://www.kickstarter.com/help/stats>).

1.1.1 The research context

The overarching question of this research, uncovering how crowdfunding works, is dependent upon understanding interactions between stakeholders and their various sites of activity, online as well as offline.

The interplay of technology with varied forms of stakeholder engagement helps define crowdfunding as a “socio-technical system” (Harburg et al., 2015, p.3). Socio-technical systems feature a technical component (hardware, software) and a social component (personal, social) (Whitworth & Ahmad, 2014). These interlinkages between the social and the technical can work to support crowdfunding project creators (Harburg et al., 2015). Indeed, across this research, a consideration of both components is the means through which a comprehensive understanding of crowdfunding activity is achieved.

By foregrounding the ways in which stakeholders engage with technology through diverse activities, this research fits within a discussion of social computing, a field that considers how technology can support social interaction (Erickson, 2013). Social computing sits at the intersection of computer science, economics and social sciences (CRCS, 2016). This is consistent with the disciplines influencing existing crowdfunding research (Chapter 2). The outcomes of this thesis, merging an understanding of crowdfunding activity with specific recommendations for creators to maximise project success (Chapter 7), further emphasise a social computing orientation.

1.2 Scope: parameters of research

Although online crowdfunding is a new phenomenon, it draws from both other online influences, as well as long-existing offline models of funding.

Crowdfunding is recognised as a sub-type of crowdsourcing, whereby action is outsourced to the skills of an undefined ‘crowd’ (Howe, 2006). Crowdsourcing was first popularised as a term in 2006, used in the context of corporate research and development problems, finding answers from ‘solvers’ across the general public (Howe, 2006). Seven elements common to crowdsourcing have been identified, all of which are reflected in this crowdfunding research:

1. Clearly defined crowd;
2. Task with a clear goal;
3. Reward to the crowd;
4. Identified crowdsourcer;
5. Benefit to the crowdsourcer;
6. Open call, and;
7. Use of the Internet (Estelles-Arolas & Gonzalez-Ladron-de-Guevara, 2012, p.197).

This research specifically refers to reward-based crowdfunding, which: “allows crowdfunders to receive a nonfinancial benefit in return to their financial contributions ” (Belleflamme et al., 2013, p.5). Reward-based crowdfunding was the fastest growing sub-type of crowdfunding when this research began in 2012, with Indiegogo and Kickstarter as the largest global sites, and Crowdfunder the leader in the UK. ‘Reward’ can appear in many different forms: physical or intangible (e.g., T-shirt versus public online recognition), individual or collective (e.g., personal digital download of a completed film versus shared enjoyment in a completed community swimming pool), one-time or incrementally distributed (e.g., receipt of a physical prototype versus staggered updates on the evolution of a longer-term project).

The projects and platforms included in this research are diverse, reflecting the variety that exists across the crowdfunding industry. This research has focused on activity common across crowdfunding, and the range of influences on this activity; less considered are platform-specific features, or characteristics limited to one type of crowdfunding project.

Crowdfunding is further defined by the parameters described in the following sections: crowdfunding platform (1.2.1), fixed details (1.2.2), project and not cause (1.2.3), exchange (1.2.4) and public access (1.2.5).

1.2.1 Crowdfunding platform

A crowdfunding platform is a designated website that hosts crowdfunding projects and facilitates the collection of funds. Platforms as project intermediaries are considered a distinguishing feature of contemporary crowdfunding (Belleflamme et al., 2014). This

thesis includes examples from ‘general’ platforms, those that accommodate many different types of projects (e.g., Indiegogo, Kickstarter), and ‘specialised’ platforms, those that only host reward-based projects of a certain type, or from a shared geographic area (e.g., Spacehive, Thundafund).

Platforms included within this research employ one of two funding models: ‘all or nothing’ (creator must meet full amount of stated goal to collect any funds) or ‘keep what you make’ (creator collects any funds accumulated during the live funding period).

Three semi-structured interviews were conducted with creators who executed projects without use of a crowdfunding platform. These projects are included as comparative examples to set against those benefitting from the structure, support and pre-existing audiences of crowdfunding platforms.

1.2.2 Fixed details: time, funds

Most crowdfunding projects have fixed timelines for the ‘live’ funding period. Typically, projects fund for 30 to 60 days, with industry research indicating that projects funding for lengthier periods are extremely demanding for the creator, lack a sense of urgency for backers, and ultimately, do not fund as successfully (Strickler, 2011). This thesis further identifies that projects with set time periods for live funding also engage with a wide range of social media and strategies for publicising projects and engaging audiences.

Funding goals are amounts set at the outset of the project by the creator. All projects included in this research publicly disclosed their funding goals at the time of project launch.

1.2.3 Project, not cause

Crowdfunding projects considered for inclusion within this research focus on specific initiatives and projects, not funding for general causes. For example, the Canary in a Coal Mine project solicits funding for the development of a film project on the medical condition ME/CFS, rather than donations in support of ME/CFS generally.

This thesis explores crowdfunding activity involved in coordinating participation towards a specific project, including the pre-funding, live funding and the post-funding periods. Although this distinction is increasingly blurred, project versus cause-based work is a differentiating feature between crowdfunding and traditional fundraising.

1.2.4 Exchange and expectation of return

Reward-based crowdfunding projects are exclusively considered within this research. Unlike investment models of crowdfunding, reward-based crowdfunding precludes backers from investing or becoming equity stakeholders through the process. Instead, backers receive symbolic rewards in recognition of their contribution. As described above, these can be physical (e.g., products), experiential (e.g., invitations to events) or symbolic (e.g., implications of 'sharing' the final product). The feature of exchange suggests different points of interaction and different levels of engagement forged between creator and backers, which will be further discussed within the context of crowdfunding community within the thesis.

1.2.5 Public access

This research assesses examples of crowdfunding where participation – both financial (e.g., funding) and non-financial (e.g., feedback) – is open to all members of the public. The range of participants – 'stakeholders' – varies, from friends and family, to a specific group, to a physically located community or to online consumers, among others.

This access to, and engagement with, a dispersed public is another defining feature of crowdfunding. Project information is publicly posted and, generally, remains online beyond the funding period regardless of whether the project was successfully funded.

Public access differentiates reward-based crowdfunding from other models of crowdfunding, such as equity crowdfunding, where platform access and project information is password protected or contingent upon membership (e.g., CrowdCube).

1.3 Motivations

Due to the emergent nature of the field, there remain gaps in knowledge across the academic research on crowdfunding, as well as underexplored themes that could provide guidance to crowdfunding practitioners (Macht & Weatherston, 2014). Adding precision to an understanding of crowdfunding is especially timely given the accelerated growth of the field.

The funds generated through crowdfunding provide an indicator of the progressive growth, and current strength, of the crowdfunding market; crowdfunding is projected to generate \$34.4 billion globally in 2015, up from 2013's reported \$6.1 billion (Massolution, 2015). Despite this growth, individual project success rates can be improved; Kickstarter platform statistics⁸ suggest that success rates have stalled, and two backers interviewed expressed the opinion that projects can no longer fund based on crowdfunding novelty alone. Uncovering how crowdfunding works through this thesis addresses this problem.

1.4 Context: crowdfunding in practice

To understand the crowdfunding landscape during the research period (2012 – 2015), this section briefly references themes of relevance to crowdfunding's development in order to summarise the contemporary context of crowdfunding in practice.

1.4.1 Background of crowdfunding

Crowdfunding is not a new concept. At its most basic, crowdfunding is the process of collecting donations over a set period from a public crowd ('backers') to help realise a project initiated by one or more creators. When understanding crowdfunding as incremental donations from a public, this definition fits examples such as the patronage model supporting Mozart's compositions and concerts in the 18th century, as well as the financing of the Statue of Liberty in New York in the 19th century (Kuppuswamy & Bayus, 2014).

⁸ Over the course of research, success rates have never exceeded 40% on Kickstarter (<http://www.kickstarter.com/help/stats>), and are lower yet for other platforms.

What characterises the contemporary iteration of crowdfunding is an online component and access to a general, widely dispersed public. This is highlighted in the following chapters through discussion of sites of crowdfunding importance (e.g., designated online platforms), crowdfunding activity (e.g., social media), and project stakeholders (e.g., engagement of both online and offline public).

The first documented use of the term ‘crowdfunding’ was in 2006 by Michael Sullivan on the now-defunct Fundavlog (WordSpy, 2008), and the idea was executed and popularised by reward-based crowdfunding platforms Indiegogo (established in 2008) and Kickstarter (established in 2009)⁹.

The following outlines the current popularisation of crowdfunding, starting at the intersection of several factors: economic developments (1.4.2), technological developments (1.4.3) and crowd activity and collaboration (1.4.4).

1.4.2 Economic developments

Providing an alternative to traditional channels of funding, crowdfunding’s popularity in the late 2000s can be partially attributed to the Great Recession, the global economic downturn from 2007 through 2009 (The National Bureau of Economic Research, 2010). The effects of this global economic crisis include constrained government budgets (Gray, 2013) and restricted access to channels such as bank loans and venture capital (Gerber et al., 2012). Crowdfunding provided a web-enabled alternative, independent of traditional offline channels for funding (Kim & Hann, 2013).

Although crowdfunding has been celebrated for its suitability to business and entrepreneurial ventures (Mollick, 2014) wishing to raise capital (Macht & Weatherston, 2014), crowdfunding also addresses funding needs for other project categories, inspiring the emergence of additional sub-types of crowdfunding within reward-based crowdfunding such as:

⁹ Several online initiatives do predate these platforms; for example, ArtistShare was established in 2000 to match artists with fans willing to fund their work.

- Civic crowdfunding, enabling citizens, in collaboration with government, to fund projects providing a community service (Stiver et al., 2015a). Civic crowdfunding is positioned as an alternative tax model (Zuckerman, 2012) in response to government budget cuts (Hollow, 2013).
- Crowdfunding for science, providing academics and researchers an opportunity to close the research funding gap created by budget cuts (Hui & Gerber, 2015) and the low rates of funding from traditional sources such as grants from the National Science Foundation (Wheat et al., 2013).
- Crowdfunding for the arts, securing funding from the crowd in response to public funding cuts and increased competition for sponsorships (Boeuf et al., 2014).

Crowdfunding developed at a time when other economic channels were constricted. Crowdfunding's ability to address specific needs across several sectors is valuable for contextualising its popularity, identifying stakeholders, and unpacking motivations for its use.

1.4.3 Technological developments

While the economic climate and limited access to capital helped propel crowdfunding's growth, technological developments also significantly influence crowdfunding's widespread popularity. The increased global use of the Internet, for example, makes crowdfunding an accessible option to many:

Table 1: Global Internet use (2016)

Date	Context	# Global Internet Users
1995	Pre-Web 2.0 (Amazon.com and EBay just beginning)	44,838,900
2000	Early days of Web 2.0	413,425,190
2008	Year Indiegogo established	1,562,067,594
2015	Estimate of present day (14 March 2016)	3,327,131,500

In addition to Internet *use*, the development of, and individuals' familiarity with, online services contributed to an environment well poised to receive crowdfunding.

E-commerce sites Amazon and eBay were established in 1994 and 1995, respectively, featuring search functions, question and answer fora, and online reviews not dissimilar to crowdfunding platform features. Further, the founding of online payment processing services PayPal and Amazon Payments, in 1998 and 2007 respectively, familiarised Internet users with the function and security of online financial transactions¹⁰.

The growing accessibility of the Internet can also influence behaviours, such as sites and types of communication. Existing research has begun to explore the influence of the Internet in these respects; for example, crediting online communication to more widespread networking, collaboration and dissemination of research in the case of scientists looking to crowdfund (Hui & Gerber, 2015).

This thesis particularly highlights the influence of associated concepts related to technological developments, Internet usage and the social development of the Internet: Web 2.0, social media, and user generated content.

Web 2.0's development is credited to the period between 2000 and 2005. It is defined by characteristics such as collaboration and interaction, blurring the line "between the creation and consumption of content in these environments" (Maness, 2006, p.1) as content is being created and modified, in an on-going way, by users (Kaplan & Haenlein, 2010).

Thanks to the rise of Web 2.0 several years prior to the growth of crowdfunding, Internet users were already familiar with, and responsive to, elements such as sociability supported through online exchange and conversation. These elements are also reflected in crowdfunding. The concept of Web 2.0 relates to online tools such as social media, but also to actions, such as collaboration and forging social relationships (Parise & Guinan, 2008). It is through Web 2.0 that crowdfunding projects came to be supported online

¹⁰ Although PayPal and Amazon Payments were popular payment processors at the outset of crowdfunding, more recent services are now being favoured such as WePay (established in 2008) and Stripe (established in 2010).

through use of a virtual platform (Macht & Weatherston, 2015, p.193). A driving feature of Web 2.0 is social relationships, forged as a result of users creating their own content, sharing, and interacting (Parise & Guinan, 2008). Web 2.0 champions elements important to crowdfunding: services over software, participation, and engagement with the power of collective intelligence (O'Reilly, 2005).

The influence of Web 2.0 has been acknowledged in existing crowdfunding research. This pertains to crowdfunding prioritising not only project promotion, but also interactions (Agrawal et al., 2011b), as well as its ability to facilitate activity beyond funding, such as testing and promoting products through stakeholder engagement (Belleflamme et al., 2010).

Particularly relevant to crowdfunding is social media, an illustration of the social networking consistent with Web 2.0. Social media is defined as “a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content.” (Kaplan & Haenlein, 2010, p.61). User generated content represents how people use social media, and is identified by three conditions. Content must:

1. Be published publicly on a site (e.g., not emails);
2. Illustrate creativity (e.g., not republished content);
3. Be created “outside of professional routines and practices” (e.g., not purely commercial use) (Kaplan & Haenlein, 2010, p.61).

Crowdfunding content fits these parameters for user generated content.

The popularisation of social media generally helped set the foundation for crowdfunding activity. Digital Trends (2014) cites the launch of Friendster in 2002 as the point when social media began gaining momentum, with dates of establishment for social media commonly used by crowdfunding listed in Table 2:

Table 2: Social media dates of establishment

Date established	Social media	Active (2016)
2002	Friendster	No (as a social networking site; being restructured as a social gaming site)
2003	MySpace	Yes (though re-launched in 2013)
	LinkedIn	Yes
2004	Facebook	Yes
2005	YouTube	Yes
2006	Twitter	Yes
2010	Instagram	Yes
2011	Google+	Yes

Although crowdfunding can occur without the use of social media, social media engagement is recognised as a success factor for projects in terms of funding total and number of backers (Moisseyev, 2013). Across the empirical research of this thesis, Facebook and Twitter are most commonly employed in the support of crowdfunding projects. These channels are used for purposes ranging from promotion to networking to collaboration. The popularity of these social media channels is relevant to crowdfunding in terms of audience and familiarity with the exchange that characterises social media. As of December 2015, Facebook cited 1.59 billion monthly active users, and Twitter, 320 million¹¹.

The popularity of social media has set an expectation for engagement and transparency online. Certain crowdfunding platform elements are adapted from social media, such as the concept of a ‘newsfeed’ or a comments section. Crowdfunding platforms also encourage use of social media through platform design, linking to or embedding social media newsfeeds onto project pages. Figure 1, picturing the landing page of a project on Kickstarter, showcases the comments section, the YouTube video, as well as links to Facebook, Twitter, and Tumblr.

¹¹ Both Facebook (<http://newsroom.fb.com/company-info/>) and Twitter (<https://about.twitter.com/company>) publish facts about their site usage, most recently updated in December 2015.

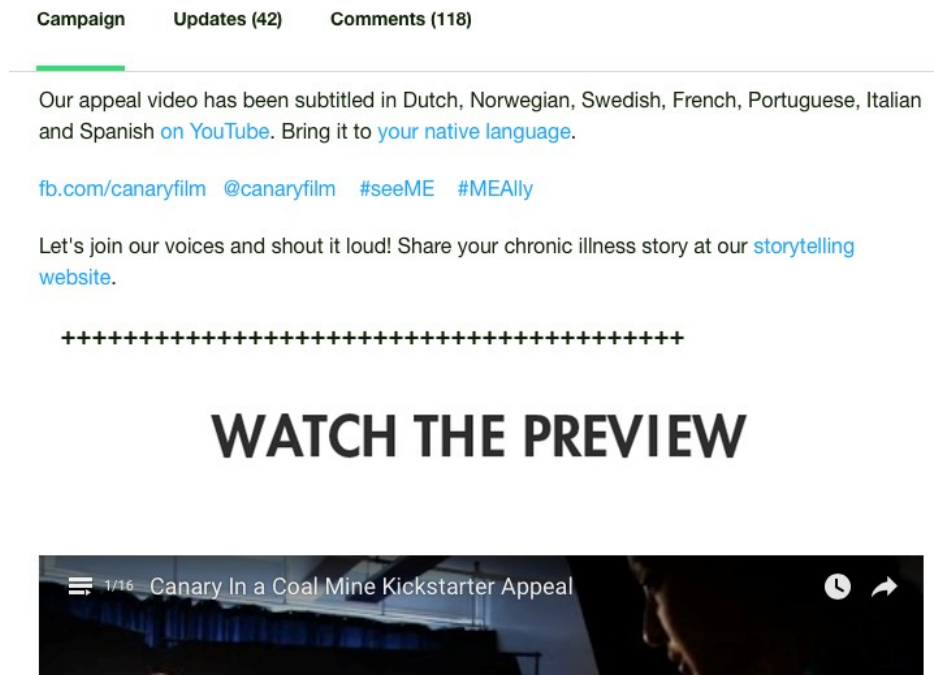


Figure 1: Social media links as presented for Canary in a Coal Mine (Kickstarter)

1.4.4 Crowd activity and collaboration

Constantinides & Fountain (2008) identify social networks as an element of Web 2.0; in this thesis, social networks are discussed in terms of ‘community’, a complex concept to unpack.

Early references to the term ‘virtual community’ are credited to Howard Rheingold in 1993 in reference to The Well (The Whole Earth ‘Lectronic Link) launched in 1985 (Reingold, 1993). Virtual, or as used in this research, *online* community is popularly found in the form of chat rooms, fora, and discussion boards; mirroring many of the sites of activity common to crowdfunding (Hof et al., 1997).

A large-scale report published by Pew Research Center’s Internet & American Life Project confirms the popularity of sites facilitating social activity: 66% of American adults online use social networking sites, citing connecting with friends and family as the primary motivation (Smith, 2011). Although the desire to connect with existing relationships is common, a list of online communities with more than one million users

reinforces the diversity across communities through varying group descriptions and registration specifics¹².

Three related concepts provide context to an understanding of the social elements of crowdfunding: participatory culture, crowdsourcing, and related online activity.

Participatory culture encourages individual expression and engagement, but also fosters a sense of meaning, as well as social connectedness, through activity (Jenkins, 2006, p.3). The accessibility of the Web, the low cost due to the minimized importance of geographic location, and the low barrier to participate and produce content (Aitamurto, 2011, p.431) have all influenced the current iteration of this phenomenon.

Crowdsourcing aligns with these characteristics of participatory culture. Crowdsourcing has several sub-types in addition to crowdfunding, including crowdcreation (content produced via the crowd), crowdvoting (opinion gathered from the crowd), and crowdwisdom (aggregated crowd information yielding average conclusions from the crowd).

Empowering stakeholders to contribute to project activity, a central principle of crowdfunding, is also reflected in co-design and co-production, two concepts that have been in existence for several decades. Co-design incorporates both designer ('creator') and user ('crowd') into the decision-making process, whereas co-production in technology brings experts and other groups together in order to 'produce' something new together (e.g., knowledge, technology) (McDougall, 2012).

With the development of these 'co'-activities online, individuals are not only encouraged to participate, but also to be key decision-makers and producers of content. The positive public reception to these approaches has set the context for the development and expansion of crowdfunding.

¹² Wikipedia provides a comprehensive list of active virtual communities with over 1 million users (https://en.wikipedia.org/wiki/List_of_virtual_communities_with_more_than_1_million_users).

A broader discussion of online activity also provides context for crowdfunding's popularity. Beyond crowdwork, online fundraising (e.g., online patronage models, micro-financing) precedes crowdfunding. Fundraising itself is not a new concept. However, like crowdfunding, online has changed the nature of fundraising insofar as “**how** people can show support to causes” (Aitamurto, 2011, p.40) [emphasis added]. Furthermore, online fundraising is increasingly more transparent and project-based (Aitamurto, 2011), characteristics echoed in crowdfunding.

1.5 Focus of research: crowdfunding

The field of crowdfunding is both developing and diversifying (Massolution, 2015). The following sections frame the existing crowdfunding landscape by addressing the current state of crowdfunding (1.5.1), types of crowdfunding (1.5.2), reward-based crowdfunding sub-types and specialisations (1.5.3) crowdfunding stakeholders (1.5.4), and crowdfunding and community (1.5.5).

1.5.1 Crowdfunding in 2015: what it looks like today

The largest and most comprehensive industry report on crowdfunding summarises research collected from over 1,250 active crowdfunding platforms (Massolution, 2015). To understand crowdfunding's scale of activity and its influence on various sectors, the following sections consider how and where crowdfunding is growing.

Although this thesis describes crowdfunding success beyond financial terms, funds generated do serve as a way to ‘trace’ projects and to mark growth of the field. Funds raised through crowdfunding increased 167% between 2013 and 2014 (Massolution, 2015), with crowdfunding platforms raising 16.2 billion (USD) in 2014. Donation and reward-based crowdfunding grew at an annualised rate of 45% and 84% respectively between 2013 and 2014 (Massolution, 2015).

North America remains the dominant crowdfunding market by a wide margin, with 9.46 billion USD raised through crowdfunding in 2014 (Massolution, 2015). Europe was the second strongest crowdfunding market, only recently surpassed by Asia (Massolution, 2015).

Examples used within this thesis are heavily geographically focused towards North America and the United Kingdom. The justification for the former is that, as the country of origin for many of the earlier platforms, as well as several that have grown to have widespread use internationally (e.g., Indiegogo, Kickstarter), the United States has a longer crowdfunding history and, consequently, greater development of the field in terms of diversity of platforms, projects, creator types, and backers. The first Indiegogo project in Canada was in 2009, and Kickstarter launched in Canada in 2013¹³.

The United Kingdom is home to a number of crowdfunding platforms, and the area of most significant crowdfunding growth within the European Union (Richards, 2012). The United Kingdom benefits from being another English-speaking region, which enables researcher comprehension across not only platform information, but also related project content such as social media channels and media coverage. This geographic focus ensures that research includes all platform and related project content (e.g., Facebook posts, Tweets, promotional videos).

Several projects from other countries (e.g., India, Poland, South Africa) are included within this research. Although geography is not a principal consideration, the use of crowdfunding in other countries is a valuable topic to broach; specifically, the issue of what can be borrowed from existing models, and what requires specific tailoring per socio-cultural, economic or political specifics of a country.

Beyond geography, the question of ‘where’ crowdfunding is growing maps on to project type. Considered together, the top five categories of crowdfunding activity comprise 83.12% of total global crowdfunding revenue from 2014 (Massolution, 2015). These categories are listed in Table 3, in descending order of % total funding volume:

¹³ News from both platforms is posted to the platform blogs: (<https://go.indiegogo.com/blog/2013/09/indiegogo-is-going-on-a-canadian-road-trip.html>) and (<https://www.kickstarter.com/blog/kickstarter-in-canada-0>), respectively.

Table 3: Top 5 crowdfunding project areas, and funding volume (2014)

Project area	% Total funding volume
Business and entrepreneurship	41.3
Social causes	18.9
Film and performing arts	12.13
Real estate	6.25
Music and recording arts	4.54
TOTAL	83.12

The project areas listed in Table 3 are not fixed across platforms, as individual platforms classify projects differently. Kickstarter, for example, features fifteen project categories, and the semi-structured interviews closely mirror Kickstarter's classifications, differentiating between art, civic, food, product development, research and social good projects (Appendix 1). This helps suggest that insights and patterns of activity reported as a result of this research could be representative.

1.5.2 Types of crowdfunding

This thesis classifies crowdfunding types in a way consistent with the UK Crowdfunding Association (UKCFA), a group founded in 2012 to promote crowdfunding, to serve as an authoritative voice across all types of crowdfunding, and to publish a code of crowdfunding practice. The UKCFA (2015) cites three types of crowdfunding:

1. Reward-based crowdfunding: this has already been outlined in Section 1.2
2. Equity: crowdfunding through which backers become investors, and their financial contributions give them shares – or equity – in the creator's company.
3. Debt: crowdfunding through which backers lend money to creators, who then repay that money over time.

Equity and debt-based crowdfunding are sufficiently distinct from reward-based crowdfunding that the findings of this research cannot be applied.

1.5.3 Reward-based crowdfunding: sub-types and specialisations

Although this research focuses on commonalities across crowdfunding, the development of sub-types of crowdfunding projects within reward-based crowdfunding (e.g.,

crowdfunding for academic research) means that certain characteristics of crowdfunding are more likely to appear in specific projects.

The strategy employed across this research was to observe general trends within reward-based crowdfunding in order to assess what varied projects can, together, reveal about crowdfunding. For example, all sub-types of crowdfunding have active timelines that extend beyond the live project itself, and all sub-types make use of sites of crowdfunding activity beyond the platform. Sub-types of crowdfunding are differentiated when relevant, such as in the example of civic crowdfunding for which offline community activity is particularly significant (Chapter 6.2.6).

1.5.4 Crowdfunding stakeholders

The choice of language for stakeholders within this thesis – ‘creator’, ‘platform’, ‘backer’ – is consistent with the terminology used in the field. ‘Creators’ and ‘platforms’ are terms commonly used across industry and academic research. The amount that creators aim to raise through funding is referred to as the ‘funding goal’. The term ‘backer’ was chosen over other synonyms – the most popular alternative being ‘donor’ – because it is flexible to incorporating both financial as well as non-financial project supports. Further, ‘backer’ is terminology of the largest reward-based crowdfunding platform, Kickstarter, an industry leader and platform of choice for many of the creators featured in this research.

Other sources have identified three principal categories of stakeholder: the party seeking funds (creators), the crowd funding the project (backers) and an intermediary (the platform) (Macht & Weatherston, 2015).

This thesis considers three primary categories of stakeholders – creators, backers, and platforms – with insights tailored to the creator perspective. This focus was motivated by two realities. First, creators were those able to provide detailed perspective on crowdfunding activity from pre-funding through to post-funding. Second, research aims to provide recommendations to maximise success of crowdfunding, both of which directly influence crowdfunding creators.

This thesis also includes discussion of a fourth type of stakeholder, revealed through empirical work: crowdfunding beneficiaries. Beneficiaries are defined as those who benefit from project outputs but are neither creators nor backers. These are not identified in other research, but represent a secondary type of stakeholder both because they do not feature in every crowdfunding project, and because research did not identify significant instances in which beneficiaries themselves affected crowdfunding project activity.

1.5.5 Crowdfunding and community

Crowdfunding's influences, as described through a discussion of Web 2.0 and collaborative crowd activity above, emphasise crowdfunding's focus on sociability and interactions. Early stages of research, as well as pilot semi-structured interviews, confirmed that crowdfunding includes significant social elements such as networking and feedback. Through this focus, non-financial activity and outcomes of crowdfunding are highlighted.

By uncovering crowdfunding activity and the stakeholders involved, the concept of community as applied to crowdfunding is considered. In this thesis the focus is placed on understanding community as it is revealed through empirical work and reinforced through existing community research. Supplemented by references to community in other crowdfunding research (Chapter 2), a consideration of community within crowdfunding uncovers both emotional and behavioural investment (Chapter 6).

1.6 Thesis structure

1.6.1 Research flow

Having observed the developing field of crowdfunding and reviewed the existing research on the subject a need for a deeper understanding of how crowdfunding works was identified, driven by the following points:

1. There is continued interest from both industry and academia in uncovering crowdfunding success factors. Specifically, there is need for improvement on project success rates, especially in anticipation of the continued growth of the field.

2. There is an opportunity to guide creators with specific strategies and supports, as creators have a specific vested interest in project success, and involvement in its activity from pre- to post-funding.
3. There is a need to make implicit crowdfunding activity explicit. Semi-structured interviews suggest that much crowdfunding activity is 'ad-hoc'. This thesis summarises experiences from past creators, extracts patterns of activity, and states them explicitly to help support future projects.

The resulting overarching research question - ***how does crowdfunding work?*** - is driven by a series of interrelated questions over four chapters:

Table 4: Flow of research questions across the thesis

Main question: how does crowdfunding work? Understanding crowdfunding through its activity		
Chapter	Overarching Question	Areas addressed
4	How is crowdfunding activity characterised	<ul style="list-style-type: none"> • What is the specific activity across crowdfunding (4.3) • Where does crowdfunding activity occur (4.3) • Why, what purpose do different activities serve (4.4) • Who drives crowdfunding activity (4.5)
5	How does timeline influence crowdfunding	<ul style="list-style-type: none"> • What are the time periods of crowdfunding (5.2) • What activity occurs per time period (5.2)
6	How does community influence crowdfunding and vice versa	<ul style="list-style-type: none"> • How is community within crowdfunding characterised (6.2) • How does community matter to crowdfunding (6.3)
7	How can creators maximise success of crowdfunding	<ul style="list-style-type: none"> • Which underlying principles support crowdfunding success (7.3) • What are the essential steps for project success (7.4)

1.6.2 Thesis roadmap

The outline of the thesis is as follows:

Chapter 2 – ‘Understanding crowdfunding within the academic landscape’, presents existing crowdfunding research from the fields of business, digital humanities, and social computing. This chapter details foundational knowledge of crowdfunding definitions,

success factors, online and offline financial and non-financial activity, and the concept of community. This chapter also identifies gaps in existing crowdfunding research that this thesis aims to address.

Chapter 3 – ‘Research approach and methodology’, outlines the methodological decisions made, and provides details of the methodology used, across this research.

Chapter 4 – ‘How is crowdfunding activity characterised - what, where, why and who’, provides the foundational building blocks of activity within crowdfunding. This is achieved through cataloguing the range of activity per site, identifying different purposes, and detailing the various involved stakeholders.

Chapter 5 – ‘When crowdfunding activity occurs - the importance of time’ emphasises the importance of timing to crowdfunding by introducing the concept of a timeline to projects. This includes five periods – three action periods, and two transition periods – each with distinct purposes and related activity.

Chapter 6 – ‘Crowdfunding and community’, introduces the concept of community within crowdfunding. The resulting definition focuses on both emotional investment and behavioural investment. The chapter unpacks the complexities of how community affects crowdfunding but, conversely, how crowdfunding can also influence community. Civic crowdfunding is presented as a specific example.

Chapter 7 – ‘Maximising success for project creators’, adopts a focused perspective on crowdfunding project success, unpacking contributing factors at two levels of granularity: underlying principles for crowdfunding success, and essential project steps. This chapter then proposes creator-targeted recommendations to maximise project outcomes.

Chapter 8 – ‘Reflections and conclusions’, summarises the significance of research findings to two principal areas: understanding crowdfunding as a field of research, and guiding and supporting project creators. In this chapter limitations and possible implementations of findings are also addressed.

Chapter 2: Understanding crowdfunding within the academic landscape

2.1 Introduction

Chapter 1 presents the broader influences and context for the development of crowdfunding. This chapter outlines topics of importance from existing research. This is accomplished through an exhaustive survey of crowdfunding research, noting the evolution of definitions and concepts core to a present-day understanding of crowdfunding.

The aim in this chapter is to focus on how themes central to this thesis have been presented in other work relating to crowdfunding, and to integrate the broad range of sources addressing topics relevant to this thesis from across disciplines.

The specific objectives of this review are to describe the following:

1. What are the principle **fields of influence** on crowdfunding research? (Section 2.2)
2. How has the **definition** of crowdfunding developed, and what are its core components? (Section 2.3)
3. How has the crowdfunding literature looked at the **concept of time**, both implicitly and explicitly? (Section 2.4)
4. What are considered crowdfunding **success factors**, and how can existing research help in identifying contributors to success as well as specific success strategies? (Section 2.5)
5. What are **financial and non-financial activity** and outputs of crowdfunding, as explored in existing work? (Section 2.6)
6. How have **online and offline activity**, in which sites of activity feature in existing crowdfunding research, been reviewed? (Section 2.7)

7. What are the **community** advantages to crowdfunding, as well as specific examples of community? What is the understanding of community through the lens of social capital theory? (Section 2.8)

2.1.1 Scope

Consistent with the parameters outlined in Chapter 1.2, the following research was excluded from the literature review:

- **Research focusing on investment, or equity, crowdfunding** - Agrawal, Catalini and Goldfarb (2014) acknowledge that there are many significant differences between equity and non-equity based crowdfunding. This thesis focuses solely on reward and donation-based models, thereby excluding research on equity and investment based project types.
- **Research on crowdfunding legislation** – There has been a significant amount of research related to crowdfunding laws and regulations due to crowdfunding’s great potential to generate funds: specifically, those surrounding United States Federal securities law and the U.S. JOBS Act, and crowdfunding regulations set out as of April 2014 by the Financial Conduct Authority in the United Kingdom. The influence of crowdfunding on larger issues of tax law, business legislation and small and medium-sized enterprise development is beyond the scope of this thesis.
- **Research on platforms operating in countries that are not represented within the empirical work of this thesis** – This decision was made as crowdfunding activity can be affected by different cultural attitudes and behaviours. This thesis also excludes studies that feature platforms that are not English-language based, as these are impossible to observe. The sole exception is work by Galuszka and Bystrov (2014) on Polish platform MegaTotal, as it provides specific insights on the discussion of community in Section 2.8.
- **Research beyond contemporary iterations of crowdfunding** - Chapter 1 outlines the breadth of influences on crowdfunding. This chapter’s assessment of the

crowdfunding research landscape, however, focuses the lens of research on present-day crowdfunding, as it exists online.

2.1.2 Rationale and approach to research review

This chapter provides a comprehensive review of existing crowdfunding literature, extracting common themes, and contending with the limitations in current literature.

A number of the themes represented in this thesis have been addressed in existing crowdfunding research but adopt: 1. a different lens of interest, or; 2. apply different scales or research methods:

1. A significant number of the crowdfunding sources discussed in this chapter refer to Kickstarter specifically. This introduces the question of transferability of insights to crowdfunding and its stakeholders more generally. Furthermore, although social media is researched within the context of crowdfunding, Facebook is often represented at the exclusion of other social media. This limits a complete sense of crowdfunding activity as well as options available to creators. In response, this thesis addresses platforms and social media more comprehensively.
2. Many sources of existing research have opted for larger-scale, quantitative crowdfunding research. While acknowledging the value of these studies, quantitative research lacks the same ability to engage with explanatory detail that characterises qualitative work.

Some themes of this thesis have been addressed in other pieces of research implicitly. For example, whereas existing work may suggest a progression and chronology to crowdfunding, this thesis identifies the importance of time, names time periods and transitions precisely, and details purpose per period (Section 2.4). As a result, this thesis adds to existing crowdfunding research by making connections across research, the implicit explicit, and combining acknowledged themes of importance from the existing research landscape with insights generated through this research.

Due to the developing nature of the field of crowdfunding, research for this chapter used an exhaustive search for literature published during the research period of this thesis.

Results of this search were then sorted by thematic area, using keywords. The structure of this chapter reflects the larger insights of this thesis. The sources included are those that best relate to the approach and content of this thesis, either by identifying gaps in research or by establishing a foundation of themes corroborating findings.

Two sources—Lehner (2013), and Macht and Weatherston (2015)— provided surveys of crowdfunding research, which guided an assessment of the existing research landscape through groupings of themes and insights. The review by Lehner (2013) was limited by its focus on crowdfunding from a business, and specifically social entrepreneurship, perspective. Although the themes of focus differ from those highlighted in this chapter, the review by Macht and Weatherston (2015) is consistent with the approach of this thesis, looking to both past influences and the current crowdfunding research landscape, with an eye towards future application.

In addition, two master's dissertations on crowdfunding provide highly relevant material: Duggal & Sassoon (2015) used qualitative research on Kickstarter to assess creator motivations for crowdfunding, whereas Moisseyev (2013) considered the effect of social media on Kickstarter project results including its positive influence on fundraising totals and backer numbers.

Research also looked to informal blog posts by academics related to crowdfunding, such as Zuckerman (2013) or McNutt (2013). These were not primary sources, but did contribute to an understanding of on-going crowdfunding research.

2.2 Current landscape: Business, digital humanities, and social computing

Langley (2015) identifies two prevalent fields from which crowdfunding research is emerging: business studies and digital humanities. This thesis also argues for the influence of social computing on crowdfunding research.

The crowdfunding literature in business studies is concentrated around two main areas: identifying contributing factors to projects' financial success (Mollick, 2014), or discussing theoretical models that position crowdfunding within an existing dialogue of financing options (Belleflamme et al., 2014). Sources from the fields of business and

management have a propensity to focus on financial results, including financial outputs such as pre-orders (Belleflamme et al., 2014), and marketing or consumer awareness (Belleflamme et al., 2010), as well as project mechanics such as delivering rewards on time (Mollick, 2014).

The existing research emerging from business studies serves as a valuable foundation. For instance, Mollick (2014) presents hypotheses about crowdfunding success through large-scale studies, using 48,500 Kickstarter projects. Although this thesis illustrates the non-financial advantages of crowdfunding, nonetheless funding is a primary activity for projects, and meeting financial target a primary goal for most creators.

An interest in crowdfunding by academics working in digital humanities and media (Langley, 2015) brings a specific focus to the use of crowdfunding within creative industries, and funding driven by fans, described as “fan-ancing” (Bennett et al., 2014, p.142). This research reflects the development of crowdfunding in practice, which emerged “primarily in the arts and creativity-based industries (e.g., recorded music, film, video games)” (Agrawal et al., 2014, p.65).

Crowdfunding research from within digital humanities often targets specific backer groups, such as crowdfunding used for music lovers (Galuszka & Bystrov, 2014) or supporters of the theatre (Boeuf et al., 2014). This category of crowdfunding research is notable for its ability to illuminate both the advantages of crowdfunding and some of the weaknesses and possible criticisms of crowdfunding, such as the exploitation of fans by media conglomerates (Chin et al., 2014).

However, although a focus on subtypes of projects can showcase the variety across crowdfunding, these sources are not primary to this thesis due to their limitations: they refer only to a certain type of crowdfunding project, and the specific backers associated. Another subtype illustrating specific elements of crowdfunding and discussed with additional detail within this thesis is civic crowdfunding, the funding of public community projects (Davies 2014; Stiver et al. 2015).

Beyond the two fields identified (Langley, 2015), a third field of research contributes significantly to crowdfunding research: that of social computing, which refers to

“applications and services that facilitate collective action and social interactions online” (Parameswaran & Whinston, 2007, p.762).

Social computing relates to themes of this thesis such as backer groups, community, online activity, and specific sites of activity facilitating sociability such as social media. Optimising the crowdfunding process is a common research area, be that through approaches considering:

- The platform, analysing updates (Xu et al., 2014) or language choice (Mitra & Gilbert, 2014);
- Stakeholder motivations (Gerber et al., 2012), or;
- Specific supports for creators (Greenberg et al., 2013b).

Social computing sources also influence crowdfunding research on community, as discussed in Section 2.8.

The social computing research emerging from Northwestern University and its Segal Design Institute¹⁴ is the most influential for this thesis. This group of researchers produced the “first qualitative study of crowdfunding work” (Hui et al., 2012, p.1). Their research is also similar to that of this thesis, citing ethnographic influence (Hui et al., 2012), strong representation of semi-structured interviews (Hui et al., 2014a, 2014b), and inductive analysis (Gerber et al., 2012).

Contributions of this research include design suggestions for platforms (Gerber et al., 2012), and discussion of support tools (Hui et al., 2012). Research emerging from this group incorporates multiple disciplines (computing, engineering, design, social sciences), and shares a focus on creators (Hui et al., 2013, 2014b). However, whereas research from the Segal Design Institute prioritises design implications for research, the research included in this thesis does not include testing, and is therefore unable to propose similar guidelines.

¹⁴ The Segal Design Institute (<http://segal.northwestern.edu>) is within the McCormick School of Engineering at Northwestern University, focusing on human-centered design. Research conducted by Faculty members Elizabeth Gerber and Darren Gergle, and doctoral students Michael Greenberg and Julie Hui, feature prominently across this thesis.

Instead, this thesis highlights the social, community component of crowdfunding and its full range of activity. For instance, no research emerging from the Segal Design Institute formally defines community within the context of crowdfunding, or discusses activity with a breadth that also includes offline.

2.3 Crowdfunding: Definitions and key components

Surveying the evolution of the definition of crowdfunding generates a sense for the various contributing perspectives to the field, as well as the perceived core component parts of the crowdfunding process.

Table 5 outlines definitions of crowdfunding dating from 2011 to 2014, ordered chronologically; the third column details notable elements from these definitions, illustrating a shift towards defining crowdfunding as a broader, less financially-focused, process.

Table 5: Summary of definitions of crowdfunding considered

Source (ordered chronologically)	Definition	Notable elements
Belleflamme et al. (2010, p.5)	<i>"an open call, mostly through the Internet, for the provision of financial resources either in form of donation or in exchange for some form of reward and/or voting rights."</i>	Acknowledges the public nature of crowdfunding ("open call"); use of the Internet; incorporates various possible forms of "financial resources"
Ordanini et al. (2011, p.444)	<i>"a collective effort by people who network and pool their money together, usually via the Internet, in order to invest in and support efforts initiated by other people or organizations"</i>	Open to interpretation beyond funding ("invest in and support"); noted role of the Internet; includes both individuals and organisations as creators
Lehner (2013, p.289)	<i>"[C]rowdfunding means tapping a large dispersed audience, dubbed as 'the crowd', for small sums of money to fund a project or a venture."</i>	Confirms a large audience of backers contributing small, incremental donations; backers can be geographically "dispersed"

Source (ordered chronologically)	Definition	Notable elements
Mollick, (2014, p.2)	<i>“the efforts by entrepreneurial individuals and groups – cultural, social, and for-profit – to fund their ventures by drawing on relatively small contributions from a relatively large number of individuals using the internet, without standard financial intermediaries ”</i>	Addresses funding, but also uses the broader term, “contributions”; identifies range of groups who might be using crowdfunding, including beyond “for-profit”
Hui et al. (2014a, p.677)	<i>“A new way for creatives to share their work and acquire resources from their social network to influence what new ideas are realized.”</i>	Focuses on “resources” rather than funding specifically; highlights social networks
Wash and Solomon, (2014, p.2)	<i>“Crowdfunding is the act of soliciting, via an open call, re- sources from a wide variety of contributors in order to realize a new idea.”</i>	Omits explicit mention of funding; acknowledges range of possible backers, and is vague about type of project “new idea”

The definitions capture elements of crowdfunding important to this thesis including use of the Internet (Belleflamme et al., 2010), towards a collective effort (Ordanini et al., 2011) by social networks (Hui et al., 2014a) to realize an idea (Wash & Solomon, 2014). A discussion of stakeholders also involves acknowledging that creators can be both individuals and groups (Mollick, 2014) and that sharing occurs across social networks (Hui et al., 2014a).

These definitions are also consistent with the position of this thesis, which frames crowdfunding as broader than funding, and richer than on-platform ‘crowds’. Notably, however, these definitions exclude an acknowledgement of both offline sites of activity relevant to crowdfunding, and the full range of financial and non-financial motivations that can affect activity for all stakeholders.

Consequently, the definition drafted for use within this thesis is:

Crowdfunding is an online process through which a project creator funds a project through incremental donations from a ‘crowd’ of backers. This process is often achieved by means of an online crowdfunding platform, and supplemented by social media and other non-financial activity. Offline elements, such as promotional events, are also frequently present.

2.4 Crowdfunding: Timeline

Most crowdfunding research describes the crowdfunding process and, through doing so, captures a sense of “chronological phases” (Macht & Weatherston, 2015, p.195). This acknowledgment of a progression along a timeline, but without its strict delineation or definition, represents a gap in research that this thesis aims to close. A sense for crowdfunding’s timeline is often implied, not explicit, in research. For instance, Hui, Gerber and Greenberg (2012) outline the amount of work required by crowdfunding, suggesting up to six months for preparation and up to a year for producing and delivering rewards. Existing research also vaguely orients crowdfunding activity in relation to the live period; in a summary of twenty-five published crowdfunding articles, phases of crowdfunding are broadly defined as:

1. Pre-investment (preceding live funding), and;
 2. Post-investment (following live funding) (Macht & Weatherston, 2015).
-
1. Pre-investment, or pre-funding, is characterised by preparatory work. Hui, Gerber and Greenberg (2012) list specific tasks required of creators during this period, such as developing a promotional video, setting a budget, and establishing rewards. Drafting project materials and developing relevant skillsets for crowdfunding work can be a challenge for creators (Hui et al., 2014b).

Existing research investigates support tools to help creators with preparing content, testing project materials, and facilitating channels for promotion, all of which imply an elongated crowdfunding timeline for creators (Hui et al., 2013). This thesis acknowledges the importance of preparatory work during pre-funding, but also emphasises the importance of networking during this period (Chapter 5.3.2).

2. Post-investment, or post-funding, is referenced in existing research through mention of longer-term success, as well as post-funding relationships. Hui, Greenberg and Gerber (2013) address the importance of supporting project execution and delivery on rewards, a discussion that implies engagement with the project beyond the live funding period. Mollick and Kuppaswamy (2014) consider post-funding activity through analysis of the longevity of successful projects beyond the funding period.

However, although this existing research has a similar focus to this thesis - reward-based crowdfunding on Kickstarter - the conclusions refer specifically to “large design, technology, and video games projects” funding before mid-2012 (Mollick & Kuppuswamy, 2014, p.2). Additionally, the benefits of crowdfunding presented refer more directly to financial bottom lines, focusing on factors such as access to additional funding, employees, press, and customer base (Mollick & Kuppuswamy, 2014, p.13). Crowdfunding as a set of chronological steps is emphasised through this discussion; creators deliver rewards to backers post-funding, and timing is influenced by factors such as amount of funding received (Mollick, 2014).

Relationships are a secondary theme related to the post-funding timeline. Crowdfunding can foster longer-term relationship-development between the creator and backer (Gerber & Hui, 2013), even persisting as support across multiple crowdfunding projects (Boeuf et al., 2014). Macht and Weatherston identify this post-investment period as an area deserving of significant additional research as the current literature is “scarce” (2015, p.201).

Existing research shows a consideration for a progression of crowdfunding steps, as well as an acknowledgment that different periods have different aims and outcomes. The sources profiled all position themselves in relation to the live funding: either ‘pre’ or ‘post’. This thesis adds precision to this, by labelling a crowdfunding timeline with set periods and transition periods, as well as with distinct purposes per period.

2.5 Crowdfunding and success factors

The notion of success within crowdfunding is a common theme across existing research. The implied goal of success factors is to maximise the successful completion of crowdfunding projects. Assessing how success is presented in existing crowdfunding research helps:

- **To reveal** various definitions of success, and to uncover the value of both meeting financial goals as well as other metrics for success (e.g., non-financial benefits), as addressed in 2.5.1;
- **To identify** both specific success factors, as well as strategies to encourage them, as addressed in 2.5.2 and;

- **To engage** with a discussion of implications for success factors, as they pertain to both creators and platforms, as addressed in 2.5.3.

2.5.1 Understanding success

Where explicitly defined, existing crowdfunding research describes success in financial terms; Mollick describes it as “successful fundraising” (2014, p.1), and Belleflamme, Lambert and Schweinbacher similarly describe it as “fundraising success” (2013, p.313). Consistent with the definitions of crowdfunding in Section 2.3, sources from fields such as economics, business and management are more likely to frame project success in purely financial terms:

“Project success has a clearly [sic] meaning in the crowdfunding realm. [...] Namely, a target capital is fixed, then the project is posted on the platform together with a deadline for collecting it. If the target capital is reached by the deadline, the proponent receives the collected amount and is thus successful.”

(Giudici et al., 2013, p.3)

Non-financial success in crowdfunding remains an emergent area of discussion, and existing research has only begun to identify that success can extend beyond the purely financial. Mollick (2014) acknowledges that stakeholders’ motivations to participate in crowdfunding can vary and, as a result, funding is not necessarily the full motivation, or sole output, of crowdfunding. Discussion of non-financial benefits to creators confirms that there can be advantages to crowdfunding beyond funding, such as connecting with others, expanding awareness of work (Gerber & Hui, 2013), mentorship, and feedback (Hui et al., 2014b).

Existing research also suggests that the type of crowdfunding project can influence the importance of financial components to an understanding of success. In the case of crowdfunding for scientific research, for instance, the ‘crowd’ takes precedence over the ‘funding’: “[t]he central element of a successful science crowdfunding campaign is developing a crowd: a set of people engaged with a scientist and their research.” (Wheat et al., 2013, p.1). In the case of creative entrepreneurs, research acknowledges the project’s financial success, but also the concept of a collective success “shared between creator and supporter.” (Gerber & Hui, 2013, p.34:15).

2.5.2 Specific success factors and strategies

The two largest-scale studies assessing determinants of success in crowdfunding, both use Kickstarter projects: Mollick (2014) considers 48,500 projects, while Müllerleile and Joenssen (2015) refer to 45,400. The success factors identified from these two studies are summarised as follows:

Mollick (2014) found three primary factors that influence project success:

1. The personal networks affiliated with a project. Research confirms this link by identifying a positive correlation between project success and size of project creators' Facebook networks;
2. The geography of crowdfunding. Geography affects both the type and the success of projects, with larger creative populations in specific locations associated with higher rates of success, and;
3. The signals of project quality. Quality, such as presence of a project video, or absence of spelling errors, indicates whether a creator had prepared well. Backer interest has a tendency to build, with would-be backers positively influenced by contributions from existing backers (Kuppuswamy & Bayus, 2014).

Müllerleile and Joenssen (2015) assessed the influence of communication and public project perception on success. They found three success factors through this work:

1. The number of authentic, well-timed, updates;
2. The set funding goal, and whether it is perceived to be realistic;
3. The number of project comments, which project a sense of activity.

These success factors are not dissimilar from the notion of project quality suggested by Mollick (2014), above. Other research on crowdfunding success factors prioritise the importance of the following:

1. On-platform strategies;
2. Timing;
3. Networks, and;
4. Differences across projects and creator skillsets

1. **On-platform strategies** - a significant number of strategies for success relate to activity on the platform; specifically, strategies pertaining to language and communication, consistent with the factors outlined above (Mollick, 2014; Müllerleile & Joenssen, 2015). Koch and Siering (2015) summarise details of importance to the project such as detailed project descriptions, a success factor confirmed by Du et al. (2015). Images and video are additional on-platform components of importance identified in existing research (Greenberg et al., 2013b).

Mitra and Gilbert (2014), identifying that specific language used within a crowdfunding project significantly influences project success, isolated the top hundred phrases signalling successful as well as unsuccessful funding. Language choice within projects is important, as backers respond to concepts such as reciprocity (backer receives something in return), scarcity (backer is motivated by a unique opportunity), social proof (backer motivated by the action of other backers), social identity (backer is incorporated into a backer group), liking (backer responds to 'likeability') and authority (backer responds to experts) (Mitra & Gilbert, 2014). A specific type of communication across crowdfunding is the project update, and Xu et al. (2014) establish a taxonomy for seven types of project updates by creators, concluding that the theme of the project update has the most direct impact on success. Gorbatai and Nelson (2015) also consider the relationship between language and successful project outcomes. In this case, the lens of gender is applied, concluding that crowdfunding could positively influence gender inequality in business as female creators tend towards positive, inclusive language (rewarded in crowdfunding) rather than "business language" (penalized in crowdfunding) (Gorbatai & Nelson, 2015, p.3). Communication also helps secure trust, and backers are motivated to join a positive, trusting community (Gerber et al., 2012). Xiao et al. (2014) also discuss language, proposing a positive relationship between money raised and detailed project communication between creator and backer during the live period. Communication across varied media, such as video, has similar positive associations with project success (Mollick, 2014).

2. **Timing** - timing is relevant to project success. Xu et al. (2014) look to timing in relation to updates used at the beginning, middle and end of the live funding period,

determining that early stages of life funding should involve social promotion, whereas mid-funding onwards requires project progress reports. Timing is also a focus of research presented by Rao et al. (2014), emphasising the dynamic nature of crowdfunding by mapping crowdfunding's flows of activity - in this case, financial activity - to the timing of projects. In doing so, the live funding period is broken down into stages with different corresponding impact on final success; activity during the initial 10% of a project timeline, and the 40 – 60% point in live funding, is particularly crucial to final funding outcomes of projects (Rao et al., 2014).

3. **Networks** - networks and social connections have a significant influence on crowdfunding results (Giudici et al., 2013). The positive effect of friends and family is particularly noted for its effect on project outcomes (Agrawal et al., 2011b). The concept of relationships also reinforces the importance of reciprocity to success, a concept discussed in Zvilichovsky et al. (2014) in the context of creators increasing their own chances of financial success by supporting other creators' projects. Social media is also identified as a success factor and paired with a discussion of social networks (Mollick, 2014); a strong correlation between number of Facebook connections and project outcomes has been reported in several pieces of research (Marelli & Ordanini, 2015). Section 2.6.2 addresses existing research on social media within crowdfunding in greater depth, and Section 2.8.5 revisits networks within a discussion of social capital.
4. **Differences across projects and creator skillsets** – differences across projects and creators can also affect how projects progress and, consequently, whether they succeed. The variable structure of projects, such as having lower funding goals, shorter funding periods, and rewards, help to signal project legitimacy to backers by providing attainable targets and concrete specifics (Bock et al., 2014). Lists of project characteristics associated with positive project outcomes include “the project nature (non-profit vs. for-profits), the project realm (firm, design, art, technology, and so on), the level of rewards, the number of Facebook contacts of the proponents, the readability of the project description, the budget of the pitches...” (Giudici et al., 2013, p.4). This list of factors influencing project success draw attention to the variability across crowdfunding.

Hui, Greenberg and Gerber (2014b) identify the importance of creator skill-set; presence of social media and networks are important, but even more crucial to crowdfunding is the ability for creators to use those social media channels to best advantage within their projects. A weakness of existing research on social media activity is that, save for Lu et al. (2014), there is limited recognition of the range of activity that can occur within one social media channel. This thesis closes that gap by itemising particular social media activities per site of activity (Chapter 4) and noting, as possible, the related purpose and the affiliated stakeholders.

2.5.3 Implications of success factors

Identification of success factors leads to application in two primary areas:

1. Creator supports, and;
 2. Considerations for platform design.
-
1. **Creator supports** - include online sites to help creators research the crowdfunding space, and to prepare in advance of project launch (Hui et al., 2013). These supports are in response to the identification of barriers to creator success, such as the challenge of developing new skills, finding sources of support, and following through with project goals (Hui et al., 2013).

Hui, Greenberg and Gerber (2014b) identify potential supports both preceding and following live funding, citing virtual personal assistants, social media tracking sites, and tools to help with execution of projects by consolidating and organising backer information. Hui, Gerber and Gergle (2014a) focus on the importance of social networks to project success and identify three challenges to implementation: activating social networks, understanding their capabilities, and expanding them. Related design implications include support tools to assist with the identification and the development of wider project audiences.
 2. **Considerations for platform design** – include those relating to success factors such as communication, recommending connecting platform content with social media, or allowing creators to use tags or colour differentiation across different

types of project updates (Xu et al., 2014). Hui, Greenberg and Gerber (2013) also propose design considerations incorporating social media, such as a Facebook tool to gauge interest in a project. In Solomon, Ma and Wash (2015), a recognition of the importance of timing to crowdfunding yields design suggestions such as offering only a limited number of rewards, or hiding the funding status from backers when a project approaches the goal amount to create a sense of urgency. Through a discussion of crowdfunding failure, research also identifies that platform interfaces could help encourage creators to persist with crowdfunding *even if* they experience a failure (Greenberg, 2015). Identifying that failure is a part of the creative process is a valuable insight to crowdfunding, and existing research confirms that creators who launch repeated rounds of projects eventually increase their success rate (Greenberg & Gerber, 2014). Although platform design is beyond the scope of this thesis, it suggests areas of interest and application for continued research.

Predicting and evaluating success has also been explored in existing research considering the impact of static factors at project launch, such as funding goal and project duration (Greenberg et al., 2013b) as well as dynamic factors such as the trajectory of projects over time and social factors such as the number of retweets over the course of a project on Twitter (Etter et al., 2013). Differentiating between success factors that are fixed at the outset of the crowdfunding project (e.g., presence of a video) and those that change over the course of a project (e.g., number of comments) is an emerging approach to studying crowdfunding success (Marelli & Ordanini, 2015).

2.6 Crowdfunding: Financial and non-financial activity and outputs

The activity of crowdfunding is not a discussion divorced from that of the preceding sections on timeline or success factors. However, there is a dearth of resources comprehensively cataloguing the full range of activity across crowdfunding, which this thesis addresses.

2.6.1 Crowdfunding ‘work’

The financial activity of crowdfunding is characterised by small, incremental donations from a crowd. As identified in the definitions featured in Table 5, this is facilitated by use

of the Internet (Belleflamme et al., 2010; Ordanini et al., 2011). Some discussion of financial activity in the form of funding patterns incorporates discussion of both timing and success factors; backers contributing in the early stages of live funding, for example, positively impact project results (Agrawal et al., 2011b; Ordanini et al., 2011).

However, research also acknowledges that a focus on the financial elements of crowdfunding obscures other important elements that structure crowdfunding (Greenberg et al., 2013a). The activity of crowdfunding can be succinctly described as an exchange between stakeholders through the use of platforms, payment systems, messaging systems, social media and video sharing (Hui et al., 2014b). Activity can be understood through the perspective of stakeholders, sites of activity, specific activities, or larger aims of activity, all of which are addressed by this thesis.

Two pieces of research by Hui, Gerber and Greenberg (Hui et al., 2012, 2014b) particularly align with the direction of this thesis, through a shared focus on creators and a perspective on activity. In both sets of research the focus is placed on purpose behind activity.

In Hui et al. (2012), crowdfunding activity understood from the perspective of the project creator is framed as crowdfunding ‘work’. Due to limited existing research on the subject, creators lack a sense for the activity and the skills required for crowdfunding, as well as an understanding for the coordination and multitasking involved in project work (Hui et al., 2012).

Hui, Greenberg and Gerber (2014b) look not only to *specific* activities, but to the overarching purpose of activities as they occur at various periods along the crowdfunding timeline. These sources emphasise that crowdfunding is not dependent upon one activity but, rather, an intersection of activities that share a reinforcing purpose. Importantly, too, these activities do not necessarily occur in a linear fashion (Hui et al., 2012) although certain steps logically precede others.

Hui, Gerber and Greenberg (Hui et al., 2014b) identify five types of crowdfunding ‘work’:
1. preparing content and prototypes; 2. testing project materials; 3. publicising and

identifying groups of support; 4. following through with project goals, and; 5. reciprocating resources including both funds (financial) and advice (non-financial). These are similar to the aims identified in Chapter 5 that align with crowdfunding time periods: 1. networking and planning; 2. publicising and preparing; 3. motivating participation; 4. delivering on promises, and; 5. engaging.

2.6.2 Social media activity

Social media activity features prominently across crowdfunding. Social media is “a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content.” (Kaplan & Haenlein, 2010, p.61).

Existing research acknowledges the importance of social media: “[c]rowdfunding is radically changing how people raise funds by allowing people to use social media to request small amounts of funds to support a project.” (Gerber & Hui, 2014, p.1). The consistently cited benefit of social media use within crowdfunding is the facilitation of social interaction (Agrawal et al., 2011b; Gerber & Hui, 2014; Moissejev, 2013; Wash, 2013).

Creators may be active in their projects using “the basic social functionality of crowdfunding sites [platforms] or also using the extended functionality of the leading social networking sites” (Moissejev, 2013, p.16). Research for this thesis featured no participants in the former category; all made some use of sites beyond the crowdfunding platform. Moissejev (2013) uses the social media classification of Kaplan and Haenlein (2010) to inform a discussion of types of social media, including blogs, social networking sites, virtual social worlds, collaborative projects, content communities and virtual game worlds. This thesis particularly identifies the importance of social networking sites Facebook and Twitter to crowdfunding. A significant amount of social media discussion focuses on Facebook (Mollick, 2014; Mollick & Kuppaswamy, 2014), though limited research expands the discussion to include Twitter (Lu et al., 2014), or to mention YouTube or Google Plus (Moissejev, 2013).

Social media activity can relate to funding of projects (as addressed in the previous section on success factors) but can also help to reinforce the discussion of non-financial activity and its advantages to creators. For instance, social media networks can serve as a key channel for the promotion and the marketing of projects (Gerber et al., 2012). Further, social media activity is a way for creators to collect information and to assess different project components through reactions from the public (Hui et al., 2014b). Existing research also acknowledges benefits from social media in the form of backer involvement in projects through collaboration (Moissejev, 2013).

Social media activity is associated with crowdfunding project success in existing crowdfunding literature due to its ability to facilitate two things: transparent activity, and social networks of support.

Social media makes crowdfunding activity “transparent” (Moissejev, 2013, p.13) and, through this, social media can influence would-be backers and motivate their participation. Social media activity such as ‘likes’ on Facebook serve as “seals of approval” (Moissejev, 2013, p.30) which drive crowdfunding activity. This social media activity is both accessible as well as immediately available to both creator and backer, helping to gauge how popular a project might be (Lu et al., 2014). Social media’s ability to foster connections across social networks leads to crucial project promotion (Lu et al., 2014). This idea has been explored through focus on Facebook and, to a lesser extent, Twitter, and contributes to the importance of communication as a success factor introduced in Section 2.5.2.

In terms of networks, Facebook activity in particular has been associated with project success; both Mollick and Kuppuswamy (2014) and Mollick (2014) draw a positive correlation between size of Facebook networks (number of Facebook friends) and positive funding outcomes. Projects with a greater number of Facebook likes are also more successful. Interestingly, Moissejev (2013) distinguishes between ‘likes’ on Facebook and Facebook friends; the former spreads information and shows approval for a project (2013, p.32), whereas the latter can take a long time to cultivate through relationship-building. This research on Facebook use within crowdfunding confirms the need for a range of strategies as creators engage with social media across their projects.

Twitter has been mentioned in research aiming specifically to predict the success of Kickstarter projects; both financial information (money raised) as well as social information (Tweets and other backer details) are considered to be predictors of success (Etter et al., 2013). Lu et al. consider social media and its impact, not only on outcomes, but also on how it develops: “there are non-negligible connections between the activities in social media and the results of crowdfunding projects” (2014, p.4). This research focuses on Twitter use in particular, yielding three conclusions about social media use within crowdfunding:

1. A strong correlation exists between social media promotion and project fundraising results, especially in the early stages of funding, pointing to the importance of both quality and quantity of social media activity;
2. Crowdfunding projects benefit from promotion across several channels, simultaneously. There is a lack, however, of research into the range of social media possible within crowdfunding projects and the ways in which they could coordinate to help achieve project goals, and;
3. The social component of social media helps projects to grow and expand into diverse channels, increasing project exposure (Lu et al., 2014).

2.6.3 The outputs of activity

Crowdfunding activity can contribute to the funding goal of the project. However, outputs can also be non-financial, defined as any activity within the project that is not directly contributing to the financial goal. .

In some cases non-financial outputs continue to refer to activity impacting the ‘business side’ of crowdfunding. Macht and Weatherston discuss the “value add” (2015, p.200) typical for crowdfunding projects, defined as the benefit that backers bring to creators and their projects beyond the financial contribution. Other research similarly positions crowdfunding as a process through which creators may identify additional funders, or

gain access to press or future employees (Mollick & Kuppuswamy, 2014). Crowdfunding can assess demand for a specific product, indicate market strength which can support bids for other sources of funding, build marketing buzz for a product, and bring media attention to an idea (Mollick, 2014). Macht and Weatherston (2014) identify similar beneficial outputs to crowdfunding, citing the advantage of media contacts and publicity afforded through crowdfunding, as well as the autonomy of creators. Belleflamme and Lambert strengthen the idea of non-financial benefits of crowdfunding, citing outputs such as understanding the consumer, “getting attention (reduced marketing costs) and obtaining feedback (market testing, market validation)” (2014, p.3). Lehner emphasises the “global outreach” (2013, p.296) that crowdfunding enjoys care of its online activity and associated social media.

Other research focuses on non-financial outputs that are more social in nature, featuring the exchange of resources such as love, and status (Greenberg et al., 2013a). Social relationships, for example, are cited as outputs of crowdfunding (Gerber et al., 2012).

Non-financial outputs of crowdfunding are associated with varied motivations to participate; for creators, to receive validation and establish relationships, and for funders to support specific causes of interest and to engage with a creative community (Gerber et al., 2012). Relationships are further linked to outputs in that backers are motivated to contribute when there is a sense of trust and relationship between stakeholders (Gerber & Hui, 2013). This is illustrated through relationships established during crowdfunding that serve to share and discuss work (Gerber et al., 2012) and that persist over the longer-term (Gerber & Hui, 2014). Other outputs include skills-building (Gerber & Hui, 2014), as well as feelings of connectedness to a like-minded community and the chance to be part of an innovative process (Gerber et al., 2012).

2.7 Crowdfunding: Offline activity and outputs

This thesis identifies both the value of offline activity to crowdfunding, and the ways in which online and offline activity work in tandem to benefit projects. The majority of the sources cited in the preceding sections refer to crowdfunding activity taking place either on the platform itself, or on other online sites. Specific strategies for success (Section 2.5)

are heavily weighed towards online approaches to ensuring positive project outcomes, such as the use of blogs, email, and online tools for project support (Hui et al., 2014b).

Discussion of offline components of crowdfunding is notably sparse across crowdfunding research. This gap has been identified, confirming that, although the Internet helps “facilitate” crowdfunding, it should not “constrain” its use to exclusively online (Müllerleile & Joenssen, 2015, p.3). In response, this thesis prioritises cataloguing offline activity, acknowledging its potential influence on stakeholders, crowdfunding timeline, sites and types of activity.

2.7.1 Offline activity

Offline activity within crowdfunding is often included within a broader discussion of geography and its impact on creators, backers, and project outcomes. Mollick (2014) refers to offline sites of activity through a discussion of geography pertaining to physical location and its influence on project outcomes (2.4). An advantage of crowdfunding is that it removes “geographic limitations” (Mollick, 2014, p.4) and distance-related economic frictions” (Agrawal et al., 2011b, p.1).

Activity common to early stage investing, such as collecting information, and providing input, do not rely on geographic proximity for crowdfunding (Agrawal et al., 2011b); indeed, 85% of funds for successful projects originate from backers at least 60 miles away from creators, and the average distance between creator and backers in projects studied was approximately 3,000 miles (Agrawal et al., 2014, p.88). Offline distance between backer and funder is also not seen as a barrier to successful funding (Agrawal et al., 2015).

Geography can have an important role in the types of projects initiated as well as the distribution of these projects, for example, the prevalence of film projects originating in Los Angeles, or technology projects from San Francisco (Mollick, 2014). Agrawal et al. also propose that crowdfunding could support projects of a type that might otherwise be challenging to fund in a certain geography, citing Minnesota’s status as third in crowdfunded technology projects (Agrawal et al., 2014, p.91).

Geography also matters insofar as a larger creative population in the location where the project creator is based is associated with greater chances of project success (Mollick, 2014, p.11). Agrawal, Catalini and Goldfarb's interest in geography pertains to proximity to backers, and different backer types (2011b, 2014, 2015).

This also includes discussion of offline contacts. Agrawal et al. (2011a) find that the online nature of crowdfunding tends to positively impact investment in a project because collecting project information and making an informed choice regarding contribution is not limited to would-be backers who are geographically close.

The exception is friends and family of the creator; 'friends and family' is a group likely to be composed of offline relationships physically local to the creator (Agrawal et al., 2011a). In this case, where "distance effect appears to proxy for a social effect" (Agrawal et al., 2015, p.253), geography continues to have influence over crowdfunding results.

Friends and family tend to be early-stage backers (Agrawal et al., 2015). These early backers are important to projects as they make significant contributions in the early stages of funding, and are less likely to be influenced by decisions made by others (Agrawal et al., 2011b). This activity can send positive project signals to more distant would-be backers (Agrawal et al., 2015). Geography is important to crowdfunding, influencing groups of backers, funding patterns of projects, while also confirming the importance of social networks, a topic discussed further in 2.8.

Other references to offline activity in crowdfunding research refer to crowdfunding work, such as using offline as a focus for project promotion and collaboration across stakeholders (Gerber & Hui, 2013).

2.7.2 Offline activity for specific crowdfunding subtypes

Some types of crowdfunding projects may be more prone to include both online and offline activity, for example:

1. Civic crowdfunding, and;
2. Crowdfunding for scientific research.

This is due to project associations with an offline group, offline community, offline site or activity, or combination thereof (Stiver et al., 2015b).

1. **Civic crowdfunding** – refers to projects “through which citizens, in collaboration with government, fund projects providing a community service.” (Stiver et al., 2015a, p.249). A typical example of a civic project is an urban community garden, where the reward is publicly shared (the completion of the garden), and the surrounding offline community benefits most directly from the output (Davies, 2014a).

This idea of a public good as output suggests that it will be “consumed equally by members of a community, regardless of their contribution to the production of the good (the crowdfunding campaign itself)” (Davies, 2014b, p.343). Other common types of civic projects, equally well-suited to shared outputs, are event-based, education and training initiatives (Davies, 2014a). In addition to shared output, it is common for civic projects to feature local backers physically surrounding the site of the project (Stiver et al., 2015b).

The nature of civic projects – commonly also incorporating stakeholders such as local governments, non-profits, and other community actors – lends itself to offline activity, often non-financial, such as the coordination of information sessions or volunteer opportunities (Stiver et al., 2015a). Beyond securing funds, research suggests that civic projects are also a way “to forge partnerships across government bodies, businesses, and citizens, and to foster the development of local communities.” (Stiver et al., 2015a, p.266).

Participation on certain civic platforms, such as ioby, is encouraged in the form of offline volunteering or other non-financial resources as much as financial contributions (Davies, 2014b). Ultimately, online and offline activities in civic projects do not occur in a vacuum; instead, they reinforce one another, with online activity complementing offline, and offline communities using online activity to strengthen connections (Stiver et al., 2015b).

2. **Crowdfunding for scientific research** – refers to scientists using crowdfunding to fund the progress of their research (Hui & Gerber, 2015). Offline activity in this context particularly relates to outreach and network-building, where scientists are encouraged to communicate offline through public lecture or print media to engage public support (Wheat et al., 2013).

These offline activities can also present themselves in the form of rewards, such as guest lectures, dinners, or hosting supporters in the laboratory (Wheat et al., 2013). This range of offline activity suggests value in forging longer-term relationships between scientist-as-creator, general public, and fellow colleagues in the field (Hui & Gerber, 2015).

The importance of networks, online and offline, remains a common thread across subtypes.

2.8 Crowdfunding: the community element

Research suggests that “for many...investing on a crowdfunding platform is an inherently social activity” (Agrawal et al., 2014, p.73). This is consistent with a central theme of this thesis, which proposes that crowdfunding is more than a tool for financing and, consequently, involves more than just funding-focused activity. Even research with a strong focus on the financial aspect acknowledges that crowdfunding as a process can offer “extra” (Belleflamme et al., 2014, p.586) community benefits to stakeholders, making participation compelling to project creators.

To address the ‘crowd’ of crowdfunding, this thesis discusses the concept of community. This is considered with a broad lens, identifying the inclusion of both emotional investment and behavioural investment (Chapter 6.4).

Community has been positioned as a success factor for crowdfunding projects; backer motivation, with access to the creator, involvement with a project of interest, and recognition and reciprocity all provide incentives to participate (Agrawal et al., 2014). Also, as discussed in 2.6.2, community activity itself helps to predict project success, with Facebook network size serving as a proxy for community (Mollick, 2014).

Varied language can be used to acknowledge social relationships and identify community; while some research explicitly addresses community (Hui et al., 2014b), other sources use different language to express a social, relational element of crowdfunding. These terms are consistent in referring to relationships that are not purely transactional, but often lack precision of meaning. For instance, Agrawal, Catalini and Goldfarb (2015) use terminology such as “social relationships”, “social networks”, “social ties” and “socially connected individuals” despite never providing firm definitions. Hui, Gerber and Gergle (2014a) also use the term “social network” across their research without definition.

Ultimately, reviewing community provides perspective on the major themes of this thesis such as:

- Crowdfunding activity itself, such as networks strengthened through social media, as researched by Moissejev (2013) and discussed in 2.6.2.
- Non-financial outputs, such as feedback and exchange, as illustrated by Colombo (2015) and other sources listed in 2.6.3;
- Timeline, including relationships preceding the crowdfunding project, such as friends and family (Agrawal et al., 2015) described in 2.7.1 and, also;
- Offline illustrations of project support, as presented through the lens of civic crowdfunding research (Stiver et al., 2015b) and addressed in 2.7.2.

2.8.1 Crowdfunding and community

Despite the importance of the financial component to crowdfunding, “[t]he exchange of money alone cannot fully explain participation...participants exchange resources with the goal of wanting to learn from and connect with others” (Gerber & Hui, 2013, p.34:23).

However, despite acknowledging that crowdfunding stakeholders “build ad hoc online communities” (Hui et al., 2014b, p.62) to help execute projects, there is a lack of research aimed at understanding crowdfunding based on “... how communities of creators and supporters interact with each other to accomplish crowdfunding goals.” (Hui et al., 2014b, p.64).

The importance of social networks for crowdfunding project support is confirmed (Hui et al., 2014b). In some cases the benefit of community is implied, in other cases it is directly linked to a project's financial success (Belleflamme et al., 2014). There is no existing research that specifically links community activity with negative project results, although the absence of networks is associated with unsuccessful funding (Mollick, 2014).

Despite the acknowledgement of community presence, and even positive impact, within projects, the term community is never formally defined within existing crowdfunding research. The most common approach in existing crowdfunding research is to draw from online community sources. Hui, Greenberg and Gerber borrow from a definition of *online* community authored by Kraut et al., citing "any virtual space where people interact to converse, exchange information or resources, learn or play" (2014b, p.63).

Harms (2007), the first research to consider motivations to participation within a crowdfunding community, also looks to definitions of virtual community (Bagozzi & Dholakia, 2002). Furthermore, statements such as "crowdfunding platforms depend on an online social community" (Gerber et al., 2012, p.3) do not specify whether crowdfunding is perfectly aligned with existing work on online communities or whether there are important points of differentiation based on factors such as context, purpose, structure, or activity.

Who makes up a community is also inconsistent. Community is often a synonym for crowdfunding backers: community is referred to as those providing financial support to projects (Harburg et al., 2015), and the "funding community" (Gerber et al., 2012, p.9). Failing to differentiate types of backers, and different communities within crowdfunding, obscures important stakeholders within crowdfunding.

Further refinement of stakeholder groups within crowdfunding can be achieved by unpacking those with a close social relationship with the creator using three objective measures of action: those who invest in the creator before any other project; those who invest most in the creator's project, and; those who invest in very few projects beyond the creator's (Agrawal et al., 2015, pp.264–265). Crowdfunding community could also be

extremely inclusive, interpreted as all stakeholders, “all types of creators and funders in the crowdfunding community” (Gerber et al., 2012, p.2).

2.8.2 Advantages of community

The act of building a network is positioned as an asset to crowdfunding, and can lead to “on-going” and “lasting” (Hui et al., 2014b, p.70) relationships, benefitting both backers and creators. This emphasises crowdfunding’s potential for an extended timeline of involvement. Although both creators and backers are involved in the crowdfunding process, community advantages are differentiated by stakeholder category:

For creators, work that occurs due to community can provide significant help to a project in the form of non-financial contributions such as providing advice, offering skills and feedback, and initiating project publicity and marketing (Hui et al., 2014b). Community helps in “strengthening commitment to an idea through feedback” (Gerber et al., 2012, p.1). Beyond specific work of crowdfunding, community can also provide creators with a means through which to “establish connections [and] gain approval” (Hui et al., 2014b, p.64). Community also benefits creators interested in multiple crowdfunding projects; Davidson and Poor (2015) suggest that raising more than one set goal could signal the existence of a community around a project.

For backers, community can serve as motivation to participate in crowdfunding as it helps forge “connectedness to a community with similar interests and ideals” (Gerber et al., 2012, p.1). Engagement with, and contribution to, a community, is a core incentive for backers to participate in crowdfunding activity (Gerber et al., 2012); crowdfunding provides potential for social benefits (Belleflamme & Lambert, 2014). In addition to funding and tangible rewards, belonging to a community is one of five principal motivations why backers contribute to crowdfunding projects (Hui et al., 2013). Backer advantages to participation in crowdfunding include being part of a community and having a way in which to support causes of interest (Hui et al., 2014b).

Although omitting use of the term ‘community’ explicitly, Agrawal, Catalini and Goldfarb also address the appeal of crowdfunding’s social component to backers, confirming that backers “...commit capital partly to obtain preferential access to the creator (e.g.,

updates, direct communication) which they value.” (2014, p.73). Backers, then, have interest in the project, as well as in being part of the early adopters supporting the creator themselves.

Advantages of community can also come in the form of financial benefit. Research addresses financial “community benefits” (Belleflamme et al., 2014, p.585), positioned as the backer advantage of having access to a pre-ordering mechanism whereby the crowdfunded product is available for earlier purchase.

2.8.3 Crowdfunding work and community

Hui, Greenberg and Gerber (2014b) as well as Belleflamme, Lambert and Schwienbacher (2014) position community as something that creators can develop within their crowdfunding projects to help ensure success and make crowdfunding a profitable option for creators. This thesis, however, suggests that communities can also pre-date crowdfunding projects or develop independent of creator input; community within crowdfunding is not necessarily dependent upon creator action. This is consistent with findings suggesting that the structure of crowdfunding itself aids in the development of community in the case of shared purpose, motivation and goals as presented on the platform, as well as people engaging through storytelling common to crowdfunding (Duggal & Sassoon, 2015).

The work involved in crowdfunding, including that of cultivating community, is commonly presented from the perspective of creators. The research of Hui, Gerber and Gergle (2014b) identifies challenges that creators face in establishing social networks, focusing on three: understanding them, activating them, and expanding their reach.

Hui, Greenberg and Gerber (2014b) outline five types of work that creators must undertake while crowdfunding; these were discussed in Section 2.6.1. Importantly, the authors maintain that community can have influence over these steps. For example, for the final step of work, contributing knowledge back to the community, community is involved in reciprocity and exchange (Hui et al., 2014b).

Creators are motivated in this final step by a sense of responsibility to the community, to provide support, and to collaborate (Hui et al., 2014b). Creators can use communities to overcome some of the challenges of crowdfunding (Hui et al., 2014b).

The work of crowdfunding is also captured through discussion of social media, which addresses not just where activity occurs, but also what outputs it can facilitate. For instance, research confirming the positive impact of social media on projects identifies important sites of crowdfunding activity beyond the platform (Moissejev, 2013). Focused consideration of Facebook establishes that the number of Facebook connections positively correlates to project success (Mollick, 2014). Social media activity was addressed with more detail in Section 2.6.2.

2.8.4 Specific illustrations of crowdfunding and community

Two case studies examine specific illustrations of community within crowdfunding: Muller et al. (2013), and Galuszka and Bystrov (2014).

Muller et al. (2013) highlight the importance of social ties to crowdfunding success. Their research considers crowdfunding as used within a closed community: an existing company's intranet on which employees are encouraged to help fund employee-initiated projects. Although Muller et al. (2013) do not define the term 'community', their research describes shared interest, shared context, and participation. Results of their research show that social ties are integral to project funding and that, although the community achieved high participation rates and individual project goals, outputs were also collective in nature, such as collaboration and meeting collective goals (Muller et al., 2013). Although the closed, corporate community studied is not comparable to the open communities featured in this research, the work of Muller et al. (2013) corroborates the core components of community within crowdfunding as presented in Chapter 6.

Galuszka and Bystrov (2014) profile backers supporting music projects on a music-oriented crowdfunding platform, MegaTotal. They conclude that backers within crowdfunding *can* be considered an online community, but are not necessarily (Galuszka & Bystrov, 2014). Note that the backers they studied had a shared interest in music. Online community in the context of their research is determined by a human component

and a technological component, reinforcing the discussion of crowdfunding as a socio-technical system from Section 2.8.

These case studies illustrate that community within crowdfunding can exist in various contexts.

2.8.5 Social capital and crowdfunding

The core idea of social capital is “the significance of relationships as a resource for social action” (Nahapiet & Ghoshal, 1998, p.242). Applying social capital theory to crowdfunding simultaneously explains benefit to individuals (e.g., set of resources accessible through personal connections) as well as whole networks (e.g., larger scale cooperation, collaboration) in a way that is consistent with the individual and collective advantages of crowdfunding (Nahapiet & Ghoshal, 1998). Social capital emphasises themes that resonate throughout this thesis such as the presence and the value of community, and financial and non-financial outcomes.

Though the precise definition of social capital is highly contested (Dasgupta & Serageldin, 2000), its overarching premise is that social networks have value (Field, 2003). Social capital has been applied across the social sciences, most popularly in sociology through Bourdieu (2011), who emphasises social networks and their resulting benefits, defining social capital as:

“the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition – or in other words, to membership in a group...”
- (Bourdieu, 2011, p.88)

Bourdieu assesses the benefit of these networks as profit (Bourdieu, 2011). This approach to social capital can be critiqued for being overly focused on economic capital in particular, and for threatening to reinforce social inequalities (Tzanakis, 2013).

Another perspective is provided by Coleman, who describes social capital as “embodied in relations among persons” (1988, p.118), reinforcing the bonding element of social relationships. Lehner (2014) further emphasises the reciprocity inherent to these

networks. Coleman acknowledges diversity of social capital, but proposes two common elements: some social structure, and some action from stakeholders within that structure. Social capital, per Coleman's understanding, is used to achieve outputs collectively that would be otherwise impossible by individuals alone (Tzanakis, 2013).

More recent work on social capital has applied the concept of social capital to explain contemporary life. Putnam (2000) focuses on social capital within a discussion of civic engagement, particularly discussing the decrease in community ties across the United States, and its influence on political and economic outcomes. The Internet itself has been pinpointed as something that can both support and threaten social capital. For example, while some existing research proposes that online activity, such as Facebook use, can promote positive connections and strengthen social bonds (Ellison et al., 2007), conflicting research suggests that the Internet can foster isolation by replacing in-person social connections (Neves, 2013).

Social capital emphasises the value that can exist within stakeholder networks, and the various forms that this value can take (e.g., economic, social). This is relevant to crowdfunding, and consistent with discussion of the importance of networks, such as friends and family, to funding results (Agrawal et al., 2011a). Social capital has also been applied by the following three sources to understand crowdfunding project success:

1. Colombo, Franzoni and Rossi-Lamastra (2015);
 2. Giudici et al (2013), and;
 3. Lehner (2014).
-
1. Colombo, Franzoni and Rossi-Lamastra (2015) apply social capital to explain timing of backers and the importance of early funding contributions to project success. The authors specifically identify internal social capital, defined as that cultivated within the "crowdfunding community" (Colombo et al., 2015, p.75), as a project success factor.

Internal social capital is used to explain how early backers are drawn to projects, and why early contributions are so crucial to project outcomes, as the social capital helps

signal to would-be backers and counter project uncertainty. Internal social capital is positively associated with amount of capital secured per project, as well as total number of backers.

In applying social capital to crowdfunding, crowdfunding platforms are identified not only as sites for funding, but also as “*loci* of social connections” (Colombo et al., 2015, p.76). This idea of internal social capital fostered within the structure of crowdfunding also identifies specific crowdfunding activities, such as funding and feedback, which cultivate relationships.

2. Giudici et al. (2013) consider creators’ social capital and their influence on project success. A differentiation is made between two types of social capital: individual (or exclusive) social capital, as indicated through factors such as number of Facebook contacts, and territorial (or locally shared) social capital, as indicated through geographical area (Giudici et al., 2013, p.4). The former is the more influential of the two within crowdfunding, linking to other research cited within this chapter such as Mollick (2014)’s research on size of Facebook networks and project success. Giudici et al. (2013) suggest that individual social capital is grounded in social networks and has a direct correlation with crowdfunding project success.
3. Lehner uses Bourdieu to identify four forms of capital to understand how they interact in the execution of crowdfunding projects: social (“networks of social connections”), economic (“material property”), cultural (“common signs and language”) and symbolic (“interpretation of cultural capital within individual norms and values”) (2014, p.482).

Using six platforms – a mix of equity and reward-based – Lehner (2014) maintains that project success cannot be predicted using metrics as simple as size of networks. Instead, “there must be something underneath, moderating the resource exchange in the corresponding networks”, a “complex interplay” (Lehner, 2014, p.479) of networks that transform social capital to economic capital.

Lehner (2014) proposes a flow of social capital: relationships between those close to the creator inspire reactions from a more dispersed group of backers. This social capital can then stimulate economic capital, if two conditions are in place: first, if a threshold level of social capital is reached by backers in the creator's primary networks and, second, if other forms of capital (cultural, economic, symbolic) is supportive. These four types of capital reinforce one another to the extent that transformation of social to economic capital is also reliant upon the development of cultural and symbolic capital (Lehner, 2014, p.494).

This thesis will return to social capital in Chapter 6 as a way of understanding community.

2.8.6 Common identity and common bond theory

Another way to understand community within crowdfunding is through common identity and bond theory.

Common identity and common bond theory (Ren et al., 2007) clarifies the ways in which individuals can feel attachment: both to a group (common identity) and to another individual (common bond). This is discussed within the context of online community, which is described as having both social and emotional components, and is characterised by voluntary participation (Ren et al., 2007, p.378).

Ren et al. (2007) begin by outlining various causes for common identity and common bond attachment.

Common identity is caused by:

- **Social categorisation**, sharing the same social category be that same medical condition, geography or university affiliation;
- **Interdependence**, supporting the same aim collaboratively, and;
- **Intergroup comparisons**, identifying an “out-group” versus an “in-group”) (Ren et al., 2007, p.387).

Common bond is caused by:

- **Social interaction** with others, establishing trust through familiarity;
- **Personal knowledge**, facilitated through self-disclosure, and;
- **Interpersonal attraction**, sharing values and priorities.

Beyond establishing cause and affirming that these attachments exist within communities, Ren et al. (2007) also propose ways in which attachment can be established and sustained. As a result, in addition to being descriptive, this theory is also prescriptive, providing specific guidelines for motivating participation within communities.

This theory frames crowdfunding within its online context, assesses crowdfunding as an illustration of community, and guides the drafting of design implications to influence activity. Although in the literature to date it has only been used within an assessment of online community, this theory is applied to the specific context of community within crowdfunding in Chapter 6.

2.9 Summary

Although a broad range of sources address topics related to crowdfunding such as crowdsourcing, social media, and online community, this chapter focuses exclusively on how themes central to this thesis have been presented in other work relating to crowdfunding in particular.

Referring to the areas of focus listed in 2.1, this review of existing research has accomplished the following, providing a foundation for the remainder of the thesis:

1. Surveying the evolution of crowdfunding's **definition** has generated a sense for the various contributing perspectives to the field, as well as perceived core component parts of the crowdfunding process. This will be expanded in Chapter 4.
2. Looking at research of the **timeline** - both during and outside of the live period - has set the stage to broaden the limited understanding of activity. Chapter 5 will detail how different factors during these periods might influence areas of interest, such as success and outputs

3. Summarising existing research on **success factors** has identified specific contributors to success as well as general approaches to crowdfunding projects, which influence the discussion of maximising project success in Chapter 7.
4. Considering the full **range of activity** (financial, non-financial; online and offline) for crowdfunding allows for a comprehensive catalogue of scope, a discussion initiated in Chapter 4 and continued throughout the core content of this thesis.
5. Addressing the ‘crowd’ of crowdfunding, the thesis discusses the concept of **community** with a broad lens, as detailed in Chapter 6.

This chapter is based on the best available evidence on the topic of crowdfunding within the research period for this thesis. However, the existing research cited in this chapter is representative of a field that is still evolving. For example, master’s dissertations and academic blogs were consulted for this chapter, as they offer a contemporary perspective on the crowdfunding landscape. However, they were used critically, as they lack peer review. Furthermore, publication time lag could compromise the application of existing research findings to a rapidly changing field.

Finally, this chapter identifies overlap of themes across existing research while simultaneously acknowledging the risk of misinterpretation. Terms such as ‘community’, ‘work’, ‘social network’, and ‘success’ can have variable understandings, and are not always clearly defined within existing research. A more in-depth appraisal of findings to assess validity of existing research is warranted, but beyond the scope of this thesis.

Chapter 3: Research approach and methodology

3.1 Introduction

This chapter discusses and justifies the research methods used within this thesis, and details how the resulting data was analysed. This is achieved through first outlining key methodological considerations influencing choice of research method (3.2), and then presenting the methods, the participants and the process (3.3, 3.4). Finally, this chapter describes analysis of collected data (3.5), concluding with a discussion of ethics (3.6) and evaluation (3.7).

3.2 Key methodological decisions

Several key methodological decisions shaped research decision-making, as discussed below:

3.2.1 Naturalistic Inquiry

This research is consistent with naturalistic inquiry, an approach whose core principles are inductive, and exclude manipulation of variables by the researcher (Lincoln & Guba, 1985, p.8). Naturalistic inquiry recognises that research cannot be value-free; across this research, for instance, the assumption is that crowdfunding is fundamentally good, that it is worth learning how to maximise its success, and that creators' actions can help influence this.

Naturalistic inquiry focuses on research in a real-world setting, enabling a consideration of participants' behaviours and choices within the context of crowdfunding as a whole. Criticisms of this approach could be the degree to which participants are influenced by factors beyond the researcher's control, or that findings could be subject to variable interpretation. A discussion of care, interpretation and generalisability (3.8.1) addresses how these criticisms are minimised.

This research is consistent with core characteristics of naturalistic inquiry, particularly in the following ways:

- **Encouraging research in its natural setting** - naturalistic inquiry suggests that phenomena cannot be divorced from their contexts, or “fragmented for separate study of the parts” (Lincoln & Guba, 1985, p.39). To that end, various crowdfunding stakeholders were interviewed in the pilot study to achieve a full picture of the crowdfunding process. Further, interviews were conducted online, the way in which most crowdfunding creators interact throughout crowdfunding, maintaining the “entity in context” (Lincoln & Guba, 1985, p.39).
- **Highlighting tacit knowledge** - naturalistic inquiry recognises the value of making the tacit explicit. This is a central theme of this research, cataloguing information about activity held by crowdfunding creators and, through this, achieving the “legitimation of tacit (intuitive, felt) knowledge...” (Lincoln & Guba, 1985, p.40).
- **Prioritising qualitative research** - save for one component part of project monitoring (Section 3.4), this research uses qualitative approaches to address how crowdfunding works. Naturalistic inquiry supports the use of qualitative over quantitative methods, citing the flexibility of the former in “dealing with multiple (and less aggregable) realities” (Lincoln & Guba, 1985, p.40). This adaptability, and ability to incorporate the variation across crowdfunding, makes qualitative methods well suited for this research. Qualitative research is particularly appropriate given the emergent nature of the crowdfunding field, as qualitative methods help in uncovering meaning (Langdridge & Hagger-Johnson, 2013) and building understanding through answering questions of ‘why’ and ‘how’ (Marshall, 1996, p.522). Qualitative methods were chosen for their ability to generate “rich, descriptive, contextually situated data” (Mann & Stewart, 2000, p.2) consistent with the aim of this research: to catalogue crowdfunding activity and, in so doing, to identify important connections, and relationships.
- **Using purposive sampling** - naturalistic inquiry focuses on purposive rather than random sampling, which includes participants in research based on a specific

characteristic. This approach is to increase “the likelihood that the full array of multiple realities will be uncovered” (Lincoln & Guba, 1985, p.40). The recruitment process is described further in 3.3.1.

- **Applying inductive data analysis** - naturalistic inquiry favours inductive data analysis, “because that process is more likely to identify the multiple realities to be found in those data; because such analysis is more likely to make the investigator-respondent (or object) interaction explicit, recognizable, and accountable...” (Lincoln & Guba, 1985, p.40). An inductive approach to analysis addresses the exploratory nature of this research and its overarching research question, asking: how does crowdfunding work? Rather than incoming hypotheses, this research is driven by deep description.
- **Grounding findings in data** - findings from naturalistic inquiry are those that flow directly from the data, rather than focusing on generalisations or broader extrapolations (Lincoln & Guba, 1985, p.42). This approach ensures that the findings of this thesis hold true for the parameters of the research included, but can only serve as hypotheses for broader application across the field of crowdfunding. A discussion of evaluation and generalisability continues in 3.7.

3.2.2 Multidisciplinarity and mixed methods

This research is multidisciplinary, as defined by “placing side by side of insights from two or more disciplines” (Repko, 2012, p.16). As described in Chapter 1, the crowdfunding landscape incorporates areas such as economics, business, technology, and the social sciences. Multidisciplinarity is particularly suited to ‘real world’ research questions, such as understanding crowdfunding activity, as the answer and application cannot be limited to one fixed discipline (Repko, 2012). Multidisciplinary work does not carry the same responsibility for integration that *interdisciplinary* work does (Repko, 2012).

There was a dearth of existing research on crowdfunding when research began in the autumn of 2012. Sources investigated spanned those from business schools, economics and management perspectives, as well as from design and innovation. These sources are

detailed in Chapter 2. Furthermore, discussion of related topics and sub-types of crowdfunding has incorporated themes from political science, policy and theory (civic crowdfunding), sociology and anthropology (community), and the natural sciences (academic and research crowdfunding). These further encourage multidisciplinary, and also suggest that research could have applied value across disciplines.

In addition to multidisciplinary, this research adopts a mixed methods approach, featuring semi-structured interviews, project monitoring, and online observation. This enabled the examination of various aspects of the same phenomenon, from different stakeholder perspectives, using different levels of detail and incorporating varied elements such as timeline, social media, and platform features (Mann & Stewart, 2000).

3.2.3 Online research

The geographic range of crowdfunding research participants reinforced the appropriateness of online research, which was able to access hard-to-reach populations and ensure a large and varied sample at no cost (Johns et al., 2004).

Online research within this thesis includes semi-structured interviews as well as project monitoring and online observation. Brabham (2010) supports this approach, maintaining that, for contacts made online, it is an appropriate level of intimacy to communicate and interview online as well. Other advantages to online research include the perception that it is less hierarchical, thereby facilitating rapport (Johns et al., 2004). It has also been suggested that online qualitative research is useful to research across many disciplines, suiting the multidisciplinary of this research (Johns et al., 2004).

Despite overwhelming advantages, online research also introduces challenges. For instance, there is a blurring of 'public' and 'private' spaces online that can be challenging to negotiate (Johns et al., 2004, p.101). To account for this, research has consulted existing work and guidelines for online social research (Hine, 2005; Mann & Stewart, 2000), as well as given particular attention to various ethical guidelines and their applicability to the online space, as discussed further in 3.7.

3.2.4 Project creator focus

At the outset of research, crowdfunding stakeholders were broadly identified by three primary categories: creators, backers, and platforms. A fourth category of stakeholder, featuring much less prominently in discussion of crowdfunding activity, is beneficiaries, those who benefit from the outcome of a project even if they themselves make no specific contribution. Given their limited role in crowdfunding activity, and the challenges of identification and recruitment, beneficiaries were not targeted as semi-structured interview participants.

As a result of pilot interviews with creators ($n = 2$), backers ($n = 2$) and platforms ($n = 2$), research focus was redirected towards project creators exclusively for their ability to provide rich detail on the full timeline of crowdfunding, including motivations to crowdfund, strategic decision-making, and online and offline supports.

Backers and platforms were deprioritised as participants for semi-structured interviews for the following reasons:

1. 'Backers' was too diverse a category of participant given the scope of this research. Pilot interviews revealed too broad a range of motivations and related activity from backers to address the overarching question of the thesis. The backers interviewed for the pilot study were also unable to offer deeper perspective on the crowdfunding project in terms of either timeline or activity.
2. Platforms are central sites of activity for the majority of projects included in this research. The pilot study included interviews with both a community manager as well as a founder of a platform, reasoning that these roles would be well positioned to address questions related to project processes, creator choices, and groups of backers. However, these pilot interviews suggested that employees of platforms lack an ability to richly discuss details such as affiliated community groups, as well as activity beyond the platform. Although the pilot interviews provided strong background information on the functional role of platforms within crowdfunding, a point addressed in Chapter 4.4, creators' perspectives on their ability to use and engage with the

platform, its features, and its supports over the course of the project was more useful to addressing the central research question.

By engaging with a creator focus, this research provides perspective on creator decision-making and ways to support project success, while also highlighting insights related to activity and time. Adopting a creator focus supports future crowdfunding creators through insights informed by the experience of past creators.

3.3 Understanding the landscape

Due to its rapid growth, maintaining an updated understanding of the crowdfunding landscape was crucial during the 2012 – 2015 research period. This was accomplished through public media such as news sites and blogs reporting crowdfunding developments. Even more importantly, this entailed general observation of platforms and projects. These steps were essential to crowdfunding research as they:

1. Ensured an updated sense for the rapidly changing crowdfunding landscape. Maintaining Google alerts for top crowdfunding news, scanning leading platforms' blogs and posted statistics, and searching social media for developments in the field through targeted keyword searches all contributed to an on-going contextualisation of research within this evolving field;
2. Allowed for a review of many illustrative examples of crowdfunding projects, a number much larger than those facilitated by the time-intensive processes of semi-structured interviews or project monitoring, and;
3. Confirmed that crowdfunding research was reflecting the crowdfunding landscape in practice. For example, having identified the importance of timing to crowdfunding through semi-structured interviews, observation reviewed the launch of Indiegogo's 'InDemand' and Kickstarter's 'Spotlight' features in 2015, both aiming to extend crowdfunding activity beyond live funding. This helped emphasise value of research and its application.

The only criteria for inclusion in observation was that content conform to the research parameters outlined in Chapter 1.2: reward-based crowdfunding, accessible to the public

and using a designated crowdfunding platform, in order to raise funds in support of a specific project featuring fixed details and exchange between creator and backer.

Through the following steps, observation facilitated industry updates, introduction of additional crowdfunding detail, familiarisation with platforms, and reflection over a broad selection of projects, all of which contributed to an understanding of the landscape within which this research fits:

- Pinterest¹⁵ was used to create different ‘boards’ for categories of content relevant to crowdfunding, including ‘pinning’ examples of successful and unsuccessful projects. Pinterest also enabled sharing and networking with others interested in the topic;
- Flipboard¹⁶ was used to categorise articles from industry and public media, as well as to borrow and share from others interested in the field;
- Twitter¹⁷ was used for updates on not only crowdfunding news, but also crowdfunding discussions. This was facilitated through following crowdfunding accounts, but also through searches using relevant hashtags (e.g., #crowdfunding, #Kickstarter, #civiccrowdfunding), and;
- A researcher diary was maintained to help place the researcher within context, featuring both objective details of projects as well as subjective feelings (Spradley, 1980, p.58). This diary features details of projects, creator choices, and platform developments. The researcher diary also includes thoughts inspired by news media stories on crowdfunding, or casual email correspondences with platforms or creators that were not part of either interviews or project monitoring. Finally, this journal documents methodological decision-making, such as outlining justifications for certain choices across the span of research, and considering additions and exclusions to the interview protocol. The researcher diary was sufficiently detailed to include connections not only within, but also across, projects and to begin the process of link-making and hypothesis generation.

¹⁵ Researcher Pinterest account: (<http://www.pinterest.com/alexandrainto>)

¹⁶ Researcher Flipboard account: (<https://flipboard.com/@cansti>)

¹⁷ Researcher Twitter account: (<http://www.twitter.com/cansti>)

3.4 Semi-structured interviews

Semi-structured interviews were chosen for their ability to engage in a focused, detailed way with project creators about the full timeline of crowdfunding, from seedling idea through to project execution. Given the nature of the research questions, semi-structured interviews were appropriate for appreciating subjective experiences, but also for extracting common themes (Sharp et al., 2007).

Semi-structured interviews featured more open than closed-ended questions (Sharp et al., 2007, p.299). General questions, such as prompting creators “tell me about how you came to use crowdfunding for your project?”, encouraged participants to highlight crowdfunding components of particular interest and value (Mann & Stewart, 2000, p.75). Although the unstructured nature of these questions made immediate comparisons across interviews challenging, the rich detail provided by creators in semi-structured interviews was more valuable than conforming to a structured, closed protocol. Open-ended questions encouraged storytelling, which naturally isolated themes of particular relevance to creators. Additionally, through analysis (3.6.1), comparisons across interviews were enabled at the thematic level.

Interviews followed a rough protocol of questions and themes per interview. The flexibility of semi-structured interviews also provided sufficient opportunity for creator input, additions, and redirects beyond the protocol. This facilitated not only in-depth understanding per interview, but also validation of themes across interviews.

3.4.1 Participant recruitment and sample size

Research participants were recruited in the following ways:

1. Outreach to personal and professional networks, including online mailing lists such as the Association of Internet Researchers (AoIR), E-Campaign Forum (ECF) and also general lists such as online message boards at The Open University;
2. Direct targeting for interviews, as a result of media mentions, a stated public willingness to share experiences, or presentation of crowdfunding particulars at public venues (e.g., Social Media Week 2014) and;
3. Recruitment through snowball sampling (Goodman, 1961).

This approach to recruitment is appropriate for the purposes of this research as it enabled access to those creators both willing and able to provide deep detail about crowdfunding.

In order to learn about the full range of crowdfunding activity, from pre-launch through to post-project, semi-structured interview recruitment focused on creators of completed projects. Of the interview participants, most had just completed their first crowdfunding project, while others ($n = 3$) had experience over a number of projects. All but two of the project creators interviewed had successful projects. Although research was open to including creators of unsuccessful projects, these individuals were more challenging to identify as well as to confirm as participants, due to limited online activity and less interest in sharing their crowdfunding experience. As a result, creators of successful projects are featured disproportionately.

In terms of geographic distribution, research participants were predominantly from North America and the United Kingdom. These areas mirror two of the most significant crowdfunding markets (Massolution, 2015), and also acknowledge crowdfunding's point of origin, for the former, and the research's point of origin, for the latter.

In terms of platform distribution, projects were hosted across eleven crowdfunding platforms, including general (e.g., Indiegogo, RocketHub), specialised (e.g., Buzzbnk, Experiment) and independent platforms, sites established specifically to help fund one project in particular. The strongest platform representation was Kickstarter ($n = 10$). The table in Appendix 1 provides further detail on the projects represented through semi-structured interviews.

In terms of sample size, number of participants was driven by the point at which new interviews ceased to unearth new insights (Mason, 2010). Rich qualitative interviews tend to require fewer in number; despite variations across project particulars, core themes were reiterated across the majority of interviews within this research.

Considerations within the structure of doctoral research - such as access, time and resources - are also important contributing factors to the research structure (Mason, 2010). Other considerations include the nature of the topic (the more clearly defined, the

fewer participants required), and the quality of data (the stronger the data, the fewer the participants needed) (Morse, 2000).

3.4.2 Stage 1: Pilot

A pilot round of semi-structured interviews (n=6) was conducted in Spring 2013. This pilot served to:

1. Test interview questions, as well as establish the general suitability of semi-structured interviews for this research;
2. Identify the means through which semi-structured interviews could be best conducted at a distance;
3. Indicate the crowdfunding stakeholders (creator, backer, platform) best suited to answer the research questions.

Pilot interviews also provided an opportunity to evaluate different approaches to online interviewing: email, instant messenger (IM) via Gchat, and Skype.

There was interest in exploring IM and e-mail interviewing for the pilot as, by not requiring transcription, these approaches eliminate all risk of transcription bias (Mann & Stewart, 2000). Furthermore, IM interviews are accessible to the participant should they wish to review content, and are time stamped (Brabham, 2010). This idea was encouraged by existing research choosing IM to interview online community members, wherein the researcher maintained that online interviews are the appropriate level of intimacy for contacts made online (Brabham, 2010).

To consider the various possible stakeholders involved in crowdfunding, the pilot interviews incorporated backer, creator, and employees of platforms. It was anticipated that all three groups could bring perspective to the central research question investigating how crowdfunding works. Three separate protocols were drafted to tailor questions for the three categories of stakeholders.

Online interviewing by text had mixed results. For example, in the case of one research participant whose native language was not English, interviewing via email provided time to think and to carefully craft responses. In other cases, however, asynchronous

communication via email restricted the ability to have discussion probes, additions, or ‘in the moment’ edits.

Further details from the six pilot interviews are in Table 6.

Table 6: Pilot breakdown: semi-structured interviews

Pilot: Semi-structured interviews		
Participant	Interview type	Stakeholder category
“E”	Skype	Backer
Future Funder	Email and Skype	Platform
“G”	Skype	Backer
Homeroom	Email and IM	Creator
Smoothe Operator	Email and IM	Creator
Spacehive	Skype	Platform

As a result of the pilot interviews two important decisions were made which were applied to the semi-structured interviews to follow: the use of Skype, and the focus on crowdfunding creators exclusively.

Across the six pilot interviews, Skype interviews proved to be the method best suited to the extended answers encouraged by the interview protocol. Skype interviews also yielded the richest detail. Skype was chosen over phone as it enables voice or video call alongside a chat function; as a result, researcher and participant could share links, copy and paste details from projects, and review details simultaneously during the interview. Furthermore, by requiring transcription, interviews via Skype enabled the researcher to engage with an additional stage of analysis.

The pilot interviews further confirmed the value of a creator focus to this research, a decision outlined in 3.2.4. Due to their project involvement from first idea through to final execution, creators were best positioned to discuss the full process of crowdfunding, the range of both financial and non-financial activity, and the various sites and stakeholders involved. The following section discusses the semi-structured interview process with crowdfunding creators.

3.4.3 Stage 2: Creator interviews, process and protocols

Semi-structured interviews with project creators (n = 26, excluding the two pilot interviews) occurred between Autumn of 2013 and Summer of 2014 (Appendix 1). The projects themselves were live between 2012 and 2014.

All semi-structured interviews followed the same process. Interviews were, on average, 30 – 45 minutes in length. As determined following the pilot, interviews were conducted via Skype. All interview participants were given a document describing the research being conducted, relevant contact information for queries, details of their participation, and how it would contribute to research. All participants provided their informed consent.

Interviews were audio recorded. The interview process generated five documents per interview:

1. A project information sheet featuring key details about the project;
2. An interview protocol with tailored questions;
3. A document of researcher notes taken during the interview;
4. A document of interview impressions drafted immediately following the interview, and;
5. A transcribed copy of the interview, completed by the interviewer.

All five of these documents were completed for all creator interviews, in advance of data analysis (3.5).

The project information sheet was compiled after the participant had confirmed the interview. Compiling the information sheet involved summarising important details per project, conducting online searches for media mentions or other references to the project or its creator, and listing all known online and offline sites of activity (**Figure 2**). In doing so, the researcher developed a preliminary sense for types of activity across the project, as well as creator decision-making. Furthermore, this process both established background details, as well as identified possible questions to include in the interview protocol.

Essential Details

Factor	Detail	Notes
Name of project	Kollektiv Gallery	
Platform used	Kickstarter	Kickstarter.com
Location of project / creator	Brighton, UK	
Category of project	Listed with an "illustration" tab on Kickstarter, but art gallery, creative	
Date of project	Late 2013 (successfully funded Nov. 17)	
Ask (\$)	3,500 GBP	
Achieved (\$)	3,615 GBP	
Rewards listed	27 categories: from 4 GBP to 250GBP	
	See Appendix for specifics.	
Funding model	Reward/perk-based crowdfunding	

Project and Creator Details

Factor	Detail	Notes
Who is the creator/s?	Sophie Giblin	
How does the creator present themselves?	"We're emerging artists who are rejuvenating recession-hit, unwillingly abandoned, dusty and forgotten locations with wonderful	

	"Any money that you donate will (only) be used to pay for the rent, bills and insurance. By donating you're supporting young artists to stay in creative entrepreneurial rose whilst rejuvenating empty high street shops"	
Number of comments on platform	1	
Number of updates from creator	4	

Funder Details

Factor	Detail	Notes
# of funders	86	
Who are the funders (if know)	(from Kickstarter stats): many from the UK, but certainly not exclusively (Japan, Brazil)	
Any sense for geographic, gender, group range?	See above	
Are there organisations, and groups (as opposed to just individuals) funding?	Unclear, but Sophie definitely had support from Librington Enterprise, her short program in London, Arts	

Figure 2: Example of project information sheet as compiled for Kollektiv Gallery interview

The protocol per interview was set in order to ensure a degree of consistency across interviews, and to facilitate the identification of themes from creator to creator. All participants were asked similar questions relating to crowdfunding process, schedule, tools and support, online as well as offline activity, and project strategies. Questions were open-ended, allowing the participant to take the interview in a direction of interest to them (Mann & Stewart, 2000, p.75). The researcher occasionally followed up with specific focused questions to probe for more detail. This approach captured the individual experience of each participant, as well as incorporated the diversity across crowdfunding, while still allowing for general replicability and comparisons across interviews in light of shared questions (Rogers et al., 2011). A sample protocol, illustrating the themes represented in semi-structured interviews with creators, is included in Appendix 3.

Researcher notes involved shorthand and in-the-moment observations or notations over the course of the interview. The format of Skype interviews enabled subtle note taking without risk of disruption to the flow of conversation. These in-the-moment notes

contributed to the drafting of detailed interview impressions once the interview had concluded.

Interview impressions were written immediately following each interview. These reflections, typically 3 – 5 typed pages, captured thoughts on the content of the interview, the interview's relationship to other empirical work completed, and major themes emerging. Especially as the interviews progressed in number, the interview impressions document served to make connections, to draw similarities, and also to identify outliers. The impressions document also helped note specific stories or moments of particular value to the thesis, which could be flagged during transcription. These impressions documents were also circulated within the supervision team as a summary of the interview. This resulted in fruitful group discussion and, occasionally, the tailoring or re-ordering of questions from the interview protocol.

Finally, the researcher transcribed interviews by hand. Doing so enabled another step to analysis, with the researcher able to think through the flow of the interview as a whole, highlight particularly important interview quotes, and take note of sections of particular relevance to the thesis (Hammersley, 2010). The process of transcription represented an important first step for analysis (Bird, 2005), and the output of transcription was central to data analysis, detailed in 3.6.

3.5 Project monitoring

3.5.1 Introduction and influences

Monitoring of crowdfunding projects was characterised by the daily recording of project details over four pre-selected projects.

Monitoring conforms to the idea of “non-participation” (Spradley, 1980, p.59), an unobtrusive form of research that features no involvement in activities and no interactions with people¹⁸. Monitoring also focuses on online, in-context observation

¹⁸ One project creator whose project (You Should Totally Meet) was included in project monitoring, was eventually also used as a participant in semi-structured interviews.

which can be directly recorded and also help provide perspective through viewing “the familiar as strange” (Mann & Stewart, 2000, p.84).

Project monitoring is consistent with naturalistic inquiry, as described in Section 3.2.1. Monitoring is in the moment, in-context research making use of publicly accessible information to assess activities, and even patterns of activities, over several time periods of a project.

Project monitoring helped to develop an understanding of:

- Implicit rules of the crowdfunding process, such as incorporation of social media, or circulation of creator-generated project updates;
- Typical on-platform interactions;
- Points of interaction between stakeholders;
- Individual project statistics (e.g., length of project, number of funders), and;
- Varied sites of activity.

Furthermore, project monitoring served as a complement to semi-structured interviews. While interviews provided one stakeholder perspective on one project, shared retrospectively, monitoring enabled both a granularity of detail and specificity through the dynamic daily progress of a project.

3.5.2 Focused project monitoring (n = 4)

Four projects were monitored, systematically and in-depth, on a daily basis. This entailed following all online activities associated with the project, and recording their key details.

Projects targeted for monitoring were opportunistically selected: one monitored project was identified from a personal connection, two through online discussion groups, and the fourth through the creator contacting the researcher. Although a limitation of this approach, opportunistic selection was necessary to capture activity in advance of the live funding given that projects are rarely within the public domain preceding launch. Further project details are listed in Table 7 as well as in Appendix 2.

Table 7: Four projects included in project monitoring from pre- to post- funding

Project	Platform	Successful
Canary in a Coal Mine	Kickstarter	Yes
Defying Dementia	JustGiving	On-going
Reactive Grip	Kickstarter	No
You Should Totally Meet	Indiegogo	No

Due to the timing of projects, from 2013 through to 2015, project monitored contributed to the research process in various ways; building the researcher's foundational knowledge about crowdfunding, informing protocol development for semi-structured interviews, and also strengthening the development of key research themes. Pre-launch monitoring involved observing and recording any social media or website activity related to the project. Post-funding, monitoring was guided by project-related activity; once this stalled, regular observation ceased. Sites of completed projects were revisited several months post-funding to note whether any significant updates or activity had been posted in the interim. Live funding was the most activity-dense period for monitoring. Table 8 provides a summary of the monitoring timeline as well as the range of sites monitored.

Table 8: Four projects and their corresponding project monitoring timelines

Project	Days Live	Monitoring periods	Sites monitored
Canary in a Coal Mine	31	15 days pre-launch, live period, continued Facebook, direct email and Twitter monitoring	Facebook, Twitter, YouTube, Tumblr, website, platform; also media scans, including discussion fora
Defying Dementia	on-going ¹⁹	9 days pre-launch, 162 days of the live funding (on-going funding model)	Facebook, Twitter, YouTube, platform; media scans

¹⁹ Defying Dementia, funding on JustGiving.com, is funding using an on-going funding model. This involves no set timeline; the project continues to accept donations as long as the funding goal remains unmet.

Project	Days Live	Monitoring periods	Sites monitored
Reactive Grip	36	Website, blog and Facebook activity 10 months pre-crowdfunding, live period, drop-off of activity with the exception of new website content	Facebook, Twitter, YouTube, website, platform; media scans, convention promo
You Should Totally Meet	40	Facebook activity 11 months pre-crowdfunding, live period, some Facebook activity post-project	Facebook, Twitter, YouTube, website, platform; media scans

Monitoring included visiting project sites of activity and noting details of activity, followed by research notes on the full range of activities involved in a project. This occasionally also included reference to offline activities, which were either promoted online in advance, or summarised online after the fact. However, the majority of the monitored content referred to online activity. The information recorded was a combination of quantitative detail to illustrate flows of activity (e.g., # of Facebook followers over time) as well as qualitative (e.g., detailed creator updates posted online). Specific details of monitored information per site include:

Platform:

1. Number of funders
2. Amount funded
3. Number of funders per incentive (or 'reward') level
4. Number of shares to social media channels
5. Number of comments
6. Nature (tone, content) of comments
7. Posts from creators
8. Notable activity

Social media:

Facebook

1. Number of Likes

2. Number 'Talking About'
3. Content (text)
4. Content (photo, video)

Twitter

1. Number following
2. Number of followers
3. Type of followers: individuals, institutions, other projects
4. Number of Tweets
5. Content of Tweets
6. Project hashtag use
7. Discussion surrounding Tweets ('Favourites', 'Re-tweets', comments in direct response to content)

YouTube

1. Number of views
2. Number of comments
3. Number of subscribers
4. Nature of content of videos

Miscellaneous, as applicable

1. Website updates
2. Website references to crowdfunding
3. Public media mentions
4. Guest blog posts
5. Backer-generated content (e.g., video, photo, blog in support of the project)
6. Online fora discussions

For each day of live funding, project progress was recorded, making particular note of spikes and troughs of activity. This was complemented by in-the-moment researcher field notes and screen captures of content that incorporated illustrations of creator decision-making, patterns of activity, outliers and inconsistencies. These notes allowed for deeper insight into the activity of crowdfunding, as well as the stakeholders involved.

Field notes also were used to generate preliminary hypotheses, make connections, and pose questions (Figure 3).

27/10/2013

Today was, all in all, a fairly "quiet" day even though, in the 2 days since reaching the 50,000 funding goal, the project has accumulated another 12,000 dollars in funds.

85

Several things and themes have begun to emerge for me:

- the project is being supported in part because others with ME/CFS see Jen as "their" representative; she is described on FB as being "eloquent" and "articulate". In some cases, too, it is presented as her being able to do (physically) what others wish they could. There is a community of MECFS individuals and their allies but, circling the Kickstarter project itself, a very lively community itself that feels very supportive
 - o NB: this "support" can come in the form of empathizing with Jen (in a "I know how it is because xyz" way of storytelling), in providing her with links (Dr's reports, academic journals, video clips), in providing comments and feedback, etc. Far beyond financial support. In fact, in social media channels (especially FB) there is rarely – if at all – any mention to financial support / donation.
 - o There is almost this sense that Jen has been "chosen" to represent the thousands of people around the globe. It's really a magnificent feeling reading through all of these inspirational stories of people who have struggled and yet see so much hope in this project
- Jen truly embraces and encourages the spirit of reciprocity. To do so, it is not just about a request for funds and a return of several rewards/incentives but, instead, reciprocity of stories. Jen is very candid about her experiences with MECFS and others respond to these posts (and, in the case of the Tumblr, are keen to post their own stories, even if anonymously). Today's post illustrates this in a dramatic way as Jen posts to Facebook:

Figure 3: Excerpt from field notes

3.6 Data analysis

Data analysis of the semi-structured interviews as well as the monitored project information occurred at several stages. The primary approach to analysis was thematic analysis (3.6.1).

3.6.1 Thematic analysis

Thematic analysis is "a method for identifying, analysing, and reporting patterns (themes) within data" (Braun and Clarke, 2006, p.79). Driven by stated research objectives as well as the interpretation of data, thematic analysis uncovers patterns and also helps identify relationships (Thomas, 2006).

Thematic analysis was chosen for analysis because it supports an inductive approach to insight generation, meaning that codes and themes were guided by the data to varying degrees of focus (Braun and Clarke, 2006, p.83). For instance, the pilot was exploratory and exclusively data-driven, whereas later semi-structured interviews were also informed by preliminary ideas about emerging themes.

Though grounded theory was also considered for analysis, the flexibility of thematic analysis was more appropriate for this research (Braun and Clarke, 2006). Rather than a focus on the generation of theory, the research questions structuring this thesis were more suited to the identification of key concepts and patterns across crowdfunding, as prioritised by thematic analysis (Braun and Clarke, 2006). Thematic analysis recognises the value of identifying the themes themselves, both within and across data, and acknowledges that the researcher does not function within either a theoretical or an epistemological vacuum (Braun and Clarke, 2006: 84).

Central to the process of thematic analysis is the generation of codes, and the subsequent identification of themes. Codes are “labels...assigned to data fragments defined as having some common meaning or relationship.” (Carpenter & Suto, 2008, p.116). Themes are identified after the codes are sorted, resulting in a list of broad themes representing “something important about the data in relation to the research question” (Braun and Clarke, 2006, p.82). For example, in Figure 4, ‘community elements’ was the theme, and the related codes included topics such as engagement, ‘exchange, reciprocity’ and ‘mentoring’.



Figure 4: Illustration of thematic analysis: theme and its related codes

Various tools can assist in thematic analysis. For this research, the tool NVivo (Bazeley & Jackson, 2013) was used. Alternatives considered included coding ‘by hand’ using Word or Excel, and other programs, such as SPSS. Ultimately, NVivo was chosen for its ability to query the data in infinite ways, and to embrace a flexible, iterative process without pre-identified set themes.

The phases of thematic analysis within this research mirror those proposed by Braun and Clarke (2006). Table 9 lists phases in the left column, and specific details of its application to crowdfunding research on the right:

Table 9: Steps used for thematic analysis, as structured by Braun and Clarke (2006)

Phase (Braun and Clarke, 2006, p.87)	Application within thesis (specific page references to Braun and Clarke in parentheses)
1. Familiarising with data	<p>“Immersion” (87) in data occurs through repeated reading of the data.</p> <p>This began with the transcription process, and included the drafting of accompanied notes capturing impressions and possible themes of interest. Data was reviewed per interview when it was first recorded and transcribed, and then also read several additional times over the course of research. This was the very first stage in identifying commonalities, as well as outliers, across interviews.</p>

Phase (Braun and Clarke, 2006, p.87)	Application within thesis (specific page references to Braun and Clarke in parentheses)
2. Generating initial codes	<p>For this research, the list of codes used for the first round of thematic analysis was data-driven; the list began broadly, and was informed by some of the thinking emerging from the previous phase of analysis. Using NVivo, coding occurred by highlighting and naming excerpts from the transcripts. The same transcript excerpt can be named with several different codes simultaneously.</p> <p>Coding was done in three primary 'batches'; the pilot, the first round of creator interviews, and then the second round of creator interviews. A fourth and final round of coding, going through all interviews together, was done to ensure no important codes were missed.</p>
3. Searching for themes	<p>Many codes emerged from the previous phase. At this stage, research considered the range of codes listed, and began to generate clusters.</p> <p>This phase considers relationships between codes, and also identifies both major and 'sub'-themes. From this process the major themes of time and community began to emerge.</p>
4. Reviewing themes	<p>Refining the themes from the preceding phase, reviewing themes involved merging themes together as well as breaking them apart (e.g., theme: "off-platform activity" was broken down into "online" and "offline").</p> <p>Two steps were involved in this process: 1. reviewing the data coded under each theme, and confirming that they adhere to the theme, and; 2. considering themes as a whole, and assessing the extent to which they accurately represent the content of the semi-structured interviews.</p>
5. Defining and naming themes	<p>Defining involved summarising the "essence" (92) of the theme and its relevance to research. Refinement determined whether themes could be further differentiated, and if they required further breaking down.</p> <p>This phase also helped eliminate themes from consideration.</p>
6. Producing the report	<p>The final phase in analysis involved drafting a report (circulated internally to the supervision team) which "illustrates the story" (93) of the themes.</p> <p>In this step themes were extracted from NVivo into Word, described, and 'read' together. This phase clarified the argument that these themes make in favour of the research question. In the case of this research, the report also helped in the focusing and formalising of more specific research questions.</p>

The phases listed in Table 9 were repeated. Re-engaging with the data, re-coding, re-categorising and re-defining themes occurred throughout the process of thematic analysis. Analysis was iterative, and involved four passes at coding (phases 2 through 5,

above). Wengraf (2001) confirms that this is an appropriate approach for semi-structured interviews maintaining that, due to their subtlety and reliance upon contextual understanding, they require more analysis.

3.6.2 Data per research question

Different research methods, and combinations of methods, were used to answer the questions structuring this thesis. Table 10 summarises the research methods employed per core content chapter (Chapters 4 – 7), detailing the suitability of methods for specific questions, as well as the particular perspective they provided.

Table 10: Summary of research method per questions within the thesis

Chapter	Question	Research used
4	What is the specific activity across crowdfunding?	<p>Research used to address this question came from all facets of research: semi-structured interviews, as well as online project monitoring.</p> <p>Crowdfunding activity was revealed through semi-structured interview questions asking creators to share details of their crowdfunding process, or to outline the sites of activity most useful to them. Interview transcripts were coded using NVivo, per the guidelines of thematic analysis.</p> <p>Daily project monitoring explored the same activities central to projects. Through recording activity on a daily basis, project monitoring was able to corroborate interview findings on a different scale.</p>
	Where does crowdfunding activity occur?	<p>Identifying the locations of crowdfunding activity used research from semi-structured interviews as well as from project monitoring.</p> <p>Sites of activity were revealed through interviews with project creators; these details emerged both through general creator answers as well as more targeted questions, such as one inquiring specifically about social media use within projects. It was through the former type of conversational answer from creators that 'hidden' sites of activity within crowdfunding projects were revealed. Project monitoring further reinforced these sites of activity, highlighting those most commonly used through daily recording of details per site.</p>
	Why, what purpose do different activities serve?	<p>Answering this question relied predominantly on the rich detail provided by project creators during semi-structured interviews.</p> <p>Interviews helped to identify activities, and then to confirm their strategic purpose to crowdfunding projects. In some cases, creators interviewed were able to anticipate value of activities within their crowdfunding projects. In most cases, however, the full value of activities was revealed only in hindsight. In this case, several rounds of coding using thematic analysis occurred. This included coding for any mention of 'value' to the process (both financial and non-financial), positive sentiment regarding activity (i.e., sense for what 'works'), as well as mention of aims and goals. As 'purpose' is a broad concept, analysing transcripts to answer this question required the adoption of an interpretive lens. Accuracy was maximised in this process</p>

Chapter	Question	Research used
		by ensuring that the same researcher conducted interview, transcription, and coding. This contributed towards consistency and also ensured that in cases of tone or ambiguous wording, the researcher had a more complete sense for the context.
	Who drives crowdfunding activity?	<p>This question was answered through use of pilot interviews with backers and funders, as well as the two rounds of semi-structured interviews with project creators. This was also supplemented by online observation of the crowdfunding landscape.</p> <p>Although the two principle rounds of semi-structured interviews were conducted with crowdfunding project creators, this thesis benefits from the perspective provided by the pilot round of semi-structured interviews in which backers and platforms were also interviewed. These interviews were coded using thematic analysis and helped identify the types of crowdfunding activity originating from different crowdfunding stakeholders.</p> <p>Interviews with project creators provided great detail insofar as many had planned carefully for crowdfunding and its promotion. As a result, creators were able to identify groups of active stakeholders in addition to instances of project activity that they themselves had initiated. This was somewhat project dependent, however; not all creators were able to identify the various initiators of activity across their project.</p> <p>Project monitoring helped to complement this, as on certain sites it was possible to track whether information (e.g., photo uploads) originated from creator, the platform, or another stakeholder (e.g., individual backer, larger institution).</p>
5	What are the time periods of crowdfunding activity?	<p>Answers to the question regarding crowdfunding time periods were provided using semi-structured interviews with project creators. These interviews were coded using thematic analysis. In addition to explicit mention of time, coding was done to incorporate implied mentions of time (e.g., “Y occurred after X”, suggesting a chronological progression).</p> <p>From these semi-structured interviews, some hypotheses about time periods across the crowdfunding process were generated. These hypotheses were then applied to the data from the project monitoring in order to assess whether the identified periods were consistent.</p>

Chapter	Question	Research used
	What activity occurs per time period?	<p>Two approaches to research addressed activity per crowdfunding time period. The first is semi-structured interviews. Through discussion of the crowdfunding process, creators mapped project activity onto the crowdfunding timeline. However, creator interviews varied in their specificity, in part due to the style of each individual research participant, but also because of different memories of detail. This approach helped suggest general conclusions – e.g., Facebook was used before live funding – but lacked precision.</p> <p>The second approach was the daily monitoring of projects. This provided details of four projects and the activities across them immediately preceding funding, during live funding, and at select moments post-funding. Answering this question also draws on the analysis required from the previous chapter in which foundational knowledge about crowdfunding activity (who, what, where, why, how) was outlined.</p>
6	How is community within crowdfunding characterised?	<p>Data answering this question was primarily collected through semi-structured interviews with project creators. In this case, the language around community varied; some creators used ‘community’ as a term, unprompted, whereas others used terminology such as ‘group’ or referred to ‘engagement’ or ‘neighbourhoods’. Within the context of the semi-structured interviews, transcripts were coded using thematic analysis for reference to the concept of community even if the language varied from interview to interview.</p> <p>Literature on community, especially that pertaining to online community, also helped to generate a sense for the meaning of community, and its component parts. This enabled a consideration of projects generally through online observation, including the four projects specifically monitored, through the lens of community. The projects included in research therefore served dual purpose: both to help shape a definition of community within crowdfunding, and to illustrate examples of community.</p>
	How does community matter to crowdfunding?	<p>Information to answer this question was collected through semi-structured interviews with project creators. In addition to semi-structured interviews identifying illustrations of community, on a project-by-project basis transcripts were reviewed to identify core components and also specific outputs of community within crowdfunding.</p> <p>The Stevenson Square project provided a specific illustration of advantages of community to crowdfunding, emphasising the potential of offline community as well as non-financial activity to projects. This information was provided first through semi-structured interviews, but also supplemented through online review of media, platform information and social media posts on the project.</p>

Chapter	Question	Research used
7	Which underlying principles support crowdfunding success?	<p>Data for this question was derived from the consolidation of information from the preceding two chapters. Through considering the information in the preceding chapters, a sense for underlying principles supporting project success was developed.</p> <p>In addition to the information presented in the preceding chapters, answering this question drew from both semi-structured interviews and monitored project information. Identifying underlying principles required consideration of overarching themes from empirical work. As a result, thematic analysis and coding in NVivo were particularly used for this section.</p>
	What are the essential steps for project success?	<p>This question considered component parts common to crowdfunding projects. The aim was to pair the broader characteristics from earlier in the section (e.g., communication, transparency) with the physical realities of projects. Identifying essential steps is the result of both semi-structured interviews and project monitoring. To a lesser extent, observing the crowdfunding landscape also helped to strengthen perspective on essential project steps.</p>

3.7 Ethics, consent and participant privacy

Ethical approval to carry out research with human participants was obtained from The Open University's Ethics Committee. An original ethics proforma was submitted to the Human Research Ethics Committee (HREC) in June 2013. The ethics application was modified, as approved by the Chair of the HREC, to reflect changing considerations for crowdfunding research and the anonymity of projects used within this research (April 2014).

Online research introduces additional ethical considerations (Langdridge & Hagger-Johnson, 2013). In addition to the ethical procedures guiding work at The Open University, the Association of Internet Researchers' report on ethical decision-making was consulted for its perspective on use of language within online communication, researcher self-presentation, and consideration for public and private online spaces (Markham & Buchanan, 2012).

The ethics process for semi-structured interviews involved, first and foremost, confirming informed consent and voluntary participation for every participant. This informed consent was reinforced at three stages:

1. Potential participants received an information sheet with details of the research, as well as a consent form to sign should they be willing to participate. This consent form also welcomed questions, provided participants with contact information of the researcher and supervisors, and clarified the range of possible use for the research, specifically limiting it to the thesis and any related academic publications;
2. Participants elected to 'join' the Skype call, and the researcher verbally confirmed consent before beginning;
3. Before, during, and after the interview participants were encouraged to ask questions about the research process, and were informed that they could withdraw from participation or redact portions of their contribution at any juncture.

The ethics process for project monitoring was more challenging in that online spaces are not all the same, and delineations between ‘public’ and ‘private’ can be challenging. Furthermore, certain spaces have customary laws or expectations by its users, rather than ones that are “legally enshrined” (Mann & Stewart, 2000, p.39). Two questions have been presented as considerations for online research: 1) is online information public or private, and; 2) what constitutes informed consent? (Kozinets, 2002, p.8). This research takes a conservative approach to project monitoring, including only those sites accessible to the public without need for membership. This research only observes information in the public domain that is accessible without a login or specific group membership. Research took care not to disrupt the online crowdfunding space. The only identifiable ‘footprint’ left by this research is increased page views (e.g., platform page, YouTube videos) although no creator verbalised these numbers as considerations within the context of their projects.

Despite the ‘public’ nature of social media information used within this research, all identifying names and information relating to members of the public have been anonymised wherever possible.

A secure space was established on The Open University server for any sensitive files. Transcribed interviews were anonymised for participants’ names in the case of backers. Anonymising projects, however, compromised the ability to discuss activity within its specific context. In response, the Chair of the Human Research Ethics Committee determined that creators and their projects need not be anonymised.

3.8 Evaluation

This discussion of the evaluation of research incorporates, first, an assessment of qualitative research through the lens of care, interpretation, and generalisability (3.8.1). Second, limitations of the methodological approach of this research are acknowledged with specific detail (3.8.2).

3.8.1 Care, interpretation, and generalisability

A question commonly asked of qualitative research is: “how can it be assessed?” (Stenbacka, 2001). Qualitative work is often unable to make generalisations and predictions (Langdridge & Hagger-Johnson, 2013, p.15) and, therefore, these should not be the measures by which qualitative research is evaluated. Reliability, the ability for a chosen research method to produce the same results if repeated, is also not as pertinent to this research which is neither focused on measuring any one variable nor evaluating objectivity (Stenbacka, 2001, p.552). Reliability, instead, within the context of this research, is illustrated through care, in-context interpretation, and a specific understanding of generalisability.

Care is a preliminary means of evaluating research: “systematic and careful work is always relevant, no matter the type of research” (Stenbacka, 2001, p.553). Care is achieved through good research practices such as maintaining records and detailing rigor through research design, data collection, and analysis. Illustrations of care within this research include debriefing findings with the supervision team, including screen shots and details of observed information for ‘auditability’ (Lincoln & Guba, 1985). Researcher auditability was also facilitated through maintaining a research diary, documenting observations, justifying decisions, and reporting on progress. Further, research was triangulated across several types of research – interviews, daily project monitoring and general observation – and over several research phases, confirming prevalence of themes and adding strength to findings. These activities help to cultivate a sense of research “trustworthiness” (Lincoln & Guba, 1985, p.327).

Two additional elements are relevant to an assessment of research and framed in terms of the naturalistic inquiry described in 3.2 (Lincoln & Guba, 1985): interpretation and generalisability.

Interpretation, driven by “the particulars of the case” (Lincoln & Guba, 1985, p.42) and the data itself, is a cornerstone of naturalistic inquiry. This is because context is crucial to a full and accurate understanding of reality. This principle is also what leads naturalistic inquiry away from deductive reasoning as well as broad application of findings (Lincoln

& Guba, 1985). Although the findings from this research have the potential to be tested on a broad selection of crowdfunding projects, these remain a “tentative application” (Lincoln & Guba, 1985, p.42), recognising that firm findings relate only to those that incorporate the realities of a particular research context, researcher, and participants.

Generalisability has been questioned, not only for the extent to which it is feasible, but also the extent to which it is ideal (Lincoln & Guba, 1985, p.101). Morse (1999) states that generalisability is not a concept to ignore; research loses much of its impact if it cannot be generalised at all. However, Morse (1999) proposes that the task is to redefine the parameters and the definition of generalisability for qualitative research. The true appropriate standard for generalisability within qualitative research is “not limited to demographic variables; it is the fit of the topic or the comparability of the problem that is of concern” (Morse, 1999, p.6).

The nature of this research is such that “there are always multiple perspectives; that no one perspective can “tell the full story”; and that all perspectives aggregated do not necessarily sum to the whole of the phenomenon.” (Lincoln & Guba, 1985, p.119). Consolidating both Lincoln & Guba (1985) and Morse (1999) this thesis acknowledges that the conclusions of this research relate to the specific sample of participants used. However, the insights generated might also serve as hypotheses to apply to comparable crowdfunding samples.

3.8.2 Limitations of approach

The approach to research described in this chapter presents the following limitations:

- The challenge in setting a focused lens for research;
- The disproportionate focus on successfully funded projects;
- The representation of certain projects over others;
- The reliability of memory, and;
- The challenges of language.

Setting a focused lens for research was challenging given that the field of crowdfunding is so broad. By scoping research, this approach inevitably excludes some types of crowdfunding. As a result, despite depth of detail and breadth across platforms, project

types, and geographic representation, this research cannot claim to represent all of crowdfunding. Justification of sample size and approaches to recruitment were detailed in 3.4 and 3.5.

Research, in particular the semi-structured interviews with creators, focused on successfully funded projects; this does not represent the crowdfunding success rate in practice. However, given the interest of this research in what makes crowdfunding 'work', this was a reasonable group to target for perspective. Furthermore, these creators were more receptive to participating in in-depth interviews. Finally, successful creators were able to provide insight on the full timeline of crowdfunding through to execution, project delivery and longer-term engagement, details that creators of unsuccessfully funded projects would not have.

In semi-structured interviews some participants yield more rich insights than others. Although all semi-structured interviews featured the same five documents (3.4.3), associated research processes and analysis (3.6.1), some interviews were more directly relevant to addressing the research questions than others. These are more strongly represented in this thesis through illustrative quotes and excerpts.

All creators participating in semi-structured interviews had completed crowdfunding projects; the motivation behind this was to engage with those who could share perspective on the full crowdfunding process from pre-to-post funding. However, the lapse between project activity and interview varied from creator to creator. In some cases, the protocol, inquiring about pre-funding decision-making, referred to decisions that participants had made two years prior to the interview. As such, the possibility exists that memory was compromised by time given that creators were no longer 'in the moment'. The nature of online research somewhat minimised this weakness, as creators were able to access project details and corroborate specifics of activity on social media, platform pages and, where applicable, public media mentions.

The concepts at the core of the research questions– e.g., sociability, non-financial activity, timeline – can be challenging to express, and have many articulations. Language was considered within the context of its use; for example, creator use of the terms 'group',

network', and 'neighbourhood' could all mean 'community'. However, the possibility of linguistic misunderstanding is acknowledged. The research attempted to offset this risk through several rounds of coding, as well as through one sole researcher taking responsibility for protocols, interviews, transcription and analysis, in order to benefit from a deeper contextual understanding of each interview.

3.9 Summary of methodology

The choice of method and means of analysis within this research are driven by the nature of the questions structuring this research. Research required deep insight into both implicit and explicit crowdfunding activity, its sites, its purpose, and its stakeholders. Given the limits of time, resources and access, the key methodological decisions outlined in 3.2 structured the research process and uncovered range of activity, interactions between stakeholders, and crowdfunding motivations. Semi-structured interviews provided detail to creator experiences, enabling a different perspective on crowdfunding than seminal pieces of research in the field relying on large-scale quantitative studies such as Agrawal et al. (2011b) and Mollick (2014).

Analysis of data collected through semi-structured interviews, project monitoring, and general online observation was inductive. Research did not include in-coming hypotheses, although each subsequent stage was structured by the one preceding, focusing work as it progressed. The most substantial piece of analysis was done through thematic analysis using NVivo. This is consistent with Braun and Clarke (2006) who acknowledge that inductive research is never purely divorced from the orientation of the researcher or surrounding theory.

Through detailing research design, data collection and analysis, this chapter highlights ethical approach and rigour, while minimising concerns regarding care, interpretation, and generalisability in advance of presenting findings in Chapters 4 through 7.

Chapter 4: How is crowdfunding activity characterised - what, where, why, and who

4.1 Introduction

Crowdfunding activity is central to crowdfunding; it provides project momentum, and propels a project forward. Financial and non-financial activity engages potential backers, encouraging investment towards the funding goal as well as yielding non-financial outputs through action between stakeholders.

Recognising the importance of activity to crowdfunding, this chapter asks the question:

How is crowdfunding activity characterised?

To address this question, the range, use and influence of activity is detailed across four areas of inquiry: what, where, why and who (Figure 5). Table 10 summarises the specific research methods used to answer these questions.

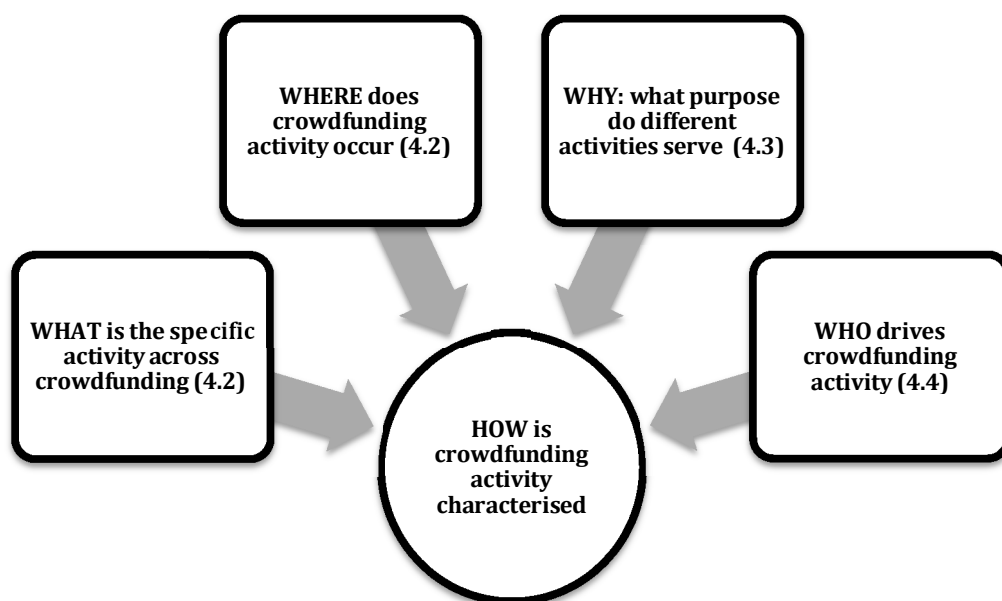


Figure 5: Chapter 4 flow

4.2 Specific activities across crowdfunding, and where it occurs

Crowdfunding activity within this thesis is identified as:

any action, online or offline, that can influence crowdfunding outcomes, including direct influences on the funding goal (e.g., the action of donating money and contributing to a project's funding goal) or broader influences on the project process (e.g., social action that helps engage a wider audience, resulting in a larger support base for the project).

This activity can occur at any point along the crowdfunding timeline.

Activity within crowdfunding has been acknowledged in existing crowdfunding research. Social media in particular has been highlighted as a valuable type of activity for use during crowdfunding (Gerber et al., 2012) in order to engage with the 'crowd' as well as to influence project results (Moissejev, 2013). This thesis reinforces these ideas through cataloguing specifics of activity comprehensively across the timeline of crowdfunding, including online (on-platform, off-platform) and offline sites.

4.2.1 An introduction to crowdfunding activity

Five general types of crowdfunding activity have been identified through this research. These are not discrete, in that individual stakeholders can contribute to projects in more than one way:

1. Financial donation;
2. Contribution of original content;
3. Liking activity from another;
4. Sharing content, and;
5. Visiting.

1. **Financial donation** involves a backer contributing towards a project's funding goal, most commonly through use of a designated crowdfunding platform. This activity typically involves registering to the platform, and making a financial donation through the platform's chosen payment processor (e.g., PayPal). This activity is fairly structured and, though extremely significant, is usually a one-time action for the project.

Financial activity can also include donation of in-kind gifts, where backers provide non-financial products or services that, by offsetting costs, contribute to the project's bottom line.

2. **Contribution of original content** is a common type of activity across crowdfunding projects. Content can be online in the form of text, photo, video, or a combination thereof. Offline, original content is even less limited in its form, with contributions such as coordinating events, or circulating promotional posters. This activity can be initiated by the creator, a backer, or a project beneficiary. The various sites of this activity will be discussed in Sections 4.2.3 and 4.2.4.

Creators contribute original content over the course of a crowdfunding project, from presenting, to promoting, and, if successful, to executing the project.

Original content can be stand-alone (i.e., an isolated post), or in response to comments (i.e., part of a larger discussion). Many creators opt for blogs (Figure 6) or websites to highlight the project in addition to the designated platform page:

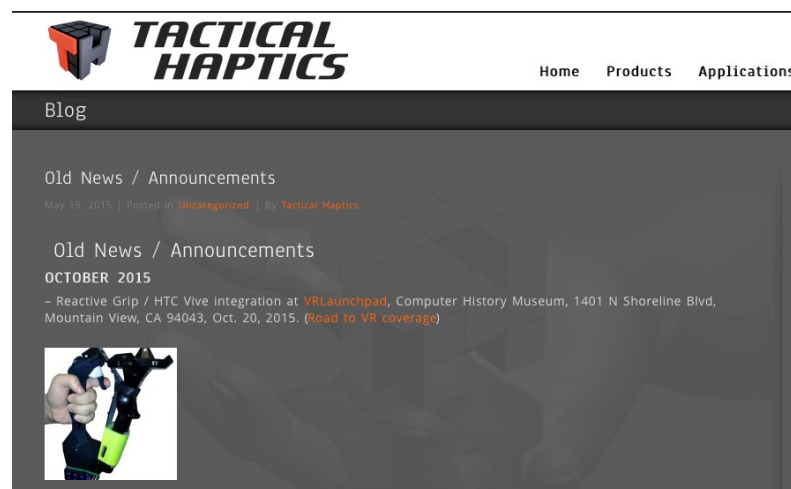


Figure 6: Blog written by creators of Reactive Grip (Kickstarter)²⁰

²⁰ All links to projects, including their platform and affiliated social media pages, are found in Appendices 1 and 2.

Backers also generate original content, sometimes with the explicit encouragement of project creators. For example, the Canary in a Coalmine project launched a Tumblr (Figure 7) enabling backers to share their illness experiences:

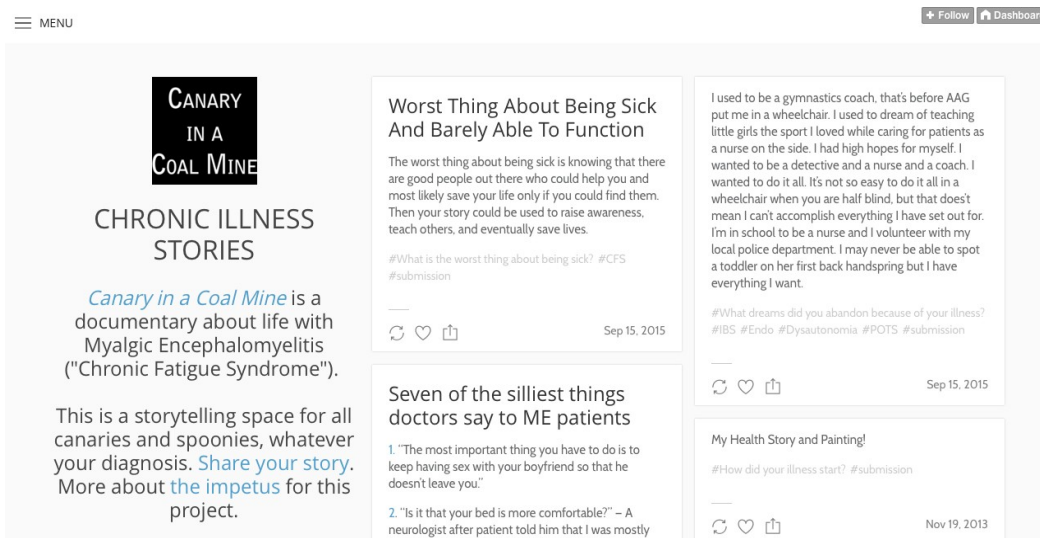


Figure 7: Canary in a Coal Mine Tumblr page²¹

However, most typically, backer-generated content is independently initiated across the platform, social media and offline. Examples include uploading photos, and a variety of comments in text (e.g., feedback, questions and project cheerleading). Although creators often respond to backer contributions through either a 'like' or a textual response, this backer-generated content generally helps to distribute the workload of project promotion and marketing. Furthermore, backer-generated content transmits public 'cues and signals' of support for the project.

3. **'Like'ing - or 'favouriting' - activity** is another common crowdfunding activity. This is a one-time action, and requires no further engagement. Although no original content is generated by 'like'ing, the activity shows public support for specific information, serves as an informal way of 'voting' on content, and provides a sense for greater stakeholder interest. The reach of 'likes' depends on the features of the site of activity, as well as the user's privacy settings. For example, a 'like' on Facebook

²¹ Canary in a Coal Mine was the only project using Tumblr to crowdfund. The site's ability to encourage storytelling was consistent with the aim of the project to facilitate the sharing of experiences with illness (<http://canaryfilm.tumblr.com>)

has the potential to be seen by all 'friends' of the 'like'r, which subtly promotes a project or specific content within it.

In addition to backers, would-be backers and beneficiaries 'like'ing content, it is common for project creators to 'like' activity originating elsewhere. For example, in Figure 8, a Facebook post from a visitor to Oranjezicht City Farm was 'liked' by the Farm.

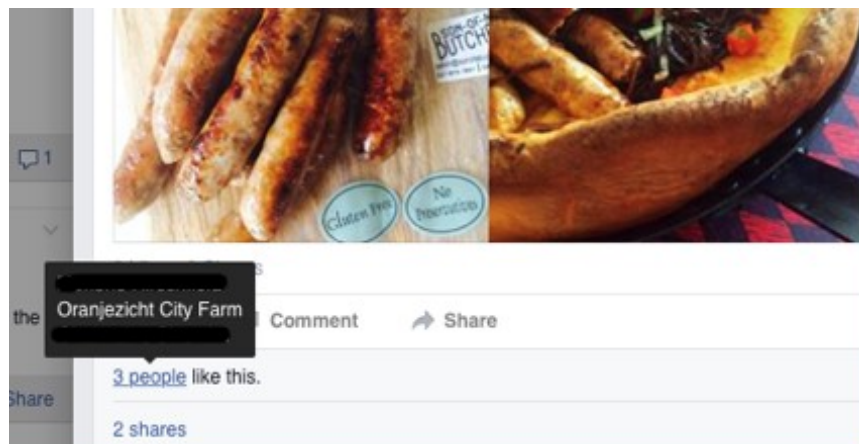


Figure 8: Oranjezicht City Farm 'like'ing a backer's Facebook post

4. **Sharing content** is an activity that can happen through many different sites and with varied articulation. This research distinguishes between sharing through online and offline channels. Online, social media channels enable sharing of content, as do crowdfunding platforms. Kickstarter, for instance, has a 'share this project' button on each project site:



Figure 9: The 'share this project' feature on Farm to Food Desert (Kickstarter)

Platforms also share content of specific projects through their social media channels:

"they [platform] publicised it as well...on their [platform] blog page, their Facebook page, and their Twitter feed, and they would pick a project a day and highlight it."
- creator, Climate for Castrators

Media stories related to crowdfunding are also a regularly shared form of content. These online articles often enable 'one-click' sharing across social media, broadcasting content to personal and professional networks (Figure 10).



Figure 10: Canary in a Coal Mine media coverage, and related 'sharing' options

By contrast, offline channels were not directly observable through research, but were mentioned during semi-structured interviews with creators. Offline project activity could include sharing information through printed flyers, word of mouth and other

interpersonal activities. Similarly, creators also reported sharing of project content through means 'hidden' to the public (e.g., private online messaging). This 'hidden' activity is discussed further in Section 4.2.2.

5. **Visiting sites of crowdfunding content** was another activity common to the project process, including viewing a project video, visiting an offline project site, or reading platform content. With the exception of offline visits, it is not possible to identify who specifically generated this activity, as it is marked only by increased site views. No creator interviewed considered page counts as an important metric for evaluating their projects. However, across the four projects whose details were recorded on a daily basis through project monitoring, there was a positive correlation between number of views of the promotional video content and other positive project developments, such as funding results.

This introduction suggests that the sites, the specifics, the purpose, and the stakeholders involved in crowdfunding activity vary, as summarised in Table 11. These points will be addressed in the following sections of the chapter.

Table 11: Introduction to types of crowdfunding activity

Type of activity	Stakeholders potentially involved	Examples of sites of activity (expanded in 4.2.3 and 4.2.4)
1. Donating financially	Backers (donating), creator (receiving), platform (facilitating)	Platforms (e.g., Kickstarter) making use of payment processing (e.g., PayPal)
2. Contributing original content	Backers, creators, beneficiaries	Online (e.g., uploading YouTube video), offline
3. 'Like'ing activity from another	Backers, creators, beneficiaries	Social media sites (e.g., Facebook, Twitter)
4. Sharing content	Backers, creators, beneficiaries, platforms	Platforms, social media, offline sharing (e.g., word of mouth, print media)
5. Visiting	Backers, beneficiaries	Online blogs (e.g., Tumblr), offline project sites

4.2.2 'Hidden' activity

An additional consideration in evaluating the activity across crowdfunding is 'hidden' activity. Identified through semi-structured interviews with creators, hidden activity

is defined as activity not visible to the public. Typically, this activity features private (one-to-one) rather than group (one-to-many) actions. The most common examples of hidden activity within this research are private or 'direct' messaging on the crowdfunding platform, Facebook and Twitter. Hidden activity also exists offline in the form of in-person networking.

Hidden activity is noteworthy given that it was cited by creators as a factor significantly affecting project outcomes.

Advantages of hidden activity include the ability to add a 'personal touch' to crowdfunding through direct communication, and to target personalised messaging to specific individuals:

"...one of the things that I found to be particularly successful was...I wrote personal messages to everybody on Facebook. I didn't send the same blanket little message to everybody..."

– creator, Seahorses

For creators looking to learn from other projects, however, the invisibility of this activity presents a challenge as it prevents the identification of potentially important project approaches and strategies. This thesis is the first to identify hidden activity. Wherever possible, hidden activity is detailed to provide additional specificity for creators to consider. In Sections 4.2.3 and 4.2.4, hidden activity is set against examples of public activity.

4.2.3 Online crowdfunding activity

This section first identifies the two principal locations of online crowdfunding activity, and then expands to include specific sites of online activity.

The two general locations for crowdfunding activity online are:

1. Crowdfunding platforms, and;
2. Off-platform sites.

1. Crowdfunding platforms were used in all but three crowdfunding projects included in this research. During the funding period platforms act as a centralised site for

activity, principally for processing financial donations. Despite the focus on financial activity, the other four types of activity identified in 4.2.1 are common to crowdfunding platforms. The platform serves to disseminate original content and information about the project, as drafted by project creators. This activity extends beyond the live funding period. For instance, the platform was the most common place for creators to share news about rewards with their backers

The platform enables liking others' activity, such as backers 'like'-ing posted creator updates. The platform also shares information about the project, the project creators, and links to contact details as well as to social media. Finally, the platforms included in research are publicly accessible, encouraging activity in the form of site visits from backers and other members of the public.

2. **Off-platform sites** featured in all the projects included in this research. Social media sites were the most commonly used for off-platform online activity, especially Facebook and Twitter. Although no financial activity occurred off-platform, the other four types of activity mentioned in 4.2.1 were common to off-platform sites. Social media in particular engaged stakeholders through original content originating from both creators and backers, helped promotion through liking others' activity, and shared content ranging from text to photo and video. The number of followers of project content on Facebook group and Twitter pages suggests that activity also occurred through more passive site visits.

Social media generally helped facilitate networking with organisations and leaders in the field who might be interested in the project.

Less commonly used were online fora and discussion boards. These served as sites for communication around projects, most notably at the outset of projects to build interest and audience. Generally, creators found these sites important for sustaining crowd attention when funding and platform activity lagged. Further discussion of activity and time is addressed in Chapter 5.

Table 12 summarises this discussion of online crowdfunding activity:

Table 12: Where and what of online crowdfunding activity

Online Activity	What? (using 5 types of activity identified in 4.2.1)				
	Financial donation	Original content	Liking others' activity	Sharing content	Visiting
1. Platform	yes	yes	yes	yes	yes
2. Social media	no	yes	yes	yes	Yes
3. Online fora, discussion boards, special interest forums	no	yes	where applicable	yes, though rarely observed	Yes

To incorporate more specificity to discussion, Table 13 considers both public and hidden online activity. These details were revealed only through semi-structured interviews with creators, as hidden activity could not be observed through project monitoring.

Table 13: Details of online activity, observable and hidden

Site of activity	Activity (Public)	Hidden activity
Platform	Commenting/discussion forum This is often the sole point of on-platform exchange between backers and creator	Contacting creators, directly and privately (e.g., Kickstarter has a “contact me” button) on some platforms
	Commenting on project updates If project creators post updates (this is a feature on Kickstarter), backers can both comment and ‘like’ the update	
Facebook	Posting a comment (to project page, to own page)	Private messaging between backers and project creator. For example, creators used private messaging extensively during live funding, and communicated project details via personal (not public) pages on Facebook.
	Posting a photo (to project page, to own page)	
	‘Like’ing a comment / photo	
	Commenting on a comment / photo	
	‘Share’ing a comment / photo from project page to yours	
	‘Like’ing the project page	Paying Facebook for targeted advertising and promotion
	Asking own personal FB networks to “like” the project page	
Twitter	“How many people talking about” (more of a signal for the creator?)	Communicating within Twitter via DM (private direct messaging).
	‘Favourite’ing a Tweet	
	Following on Twitter	
	‘Re-Tweet’ ing content	
	Tweeting @ other accounts	

The primary function of the platform is to facilitate the secure transfer of funds, working as an intermediary between backers and payment processing sites. During live funding

the crowdfunding platform also serves as a place to showcase project details, updates, contact information, and other project specifics.

Beyond sharing information, the platform can also be an important site for interaction in the form of comments threads: these may be open to the public, or restricted to all users of the platform, or to project backers only. Alternatively, comments may be used for private messages between individual backers and the creator. Commonly, those posting to project comment threads demonstrate an investment to either the project in particular, or the platform in general.

The content posted varies greatly, from general expressions of support to targeted questions soliciting specific feedback on the project or its intended output. Similarly, hidden activity on platforms varies, with the most common activity being private messaging between creator and backer.

Facebook was the most used site for activity beyond the platform. Participation requires a registered Facebook account. Specific Facebook activity occurs in one of two places, which are not mutually exclusive:

1. Private pages of individuals, and;
2. Public group pages.

As Table 13 indicates, Facebook activity incorporated within crowdfunding ranges in levels of involvement, with the three predominant categories of activity:

1. Posting own content;
 2. Responding to others' content, and;
 3. 'Like'ing content.
-
1. **Posting own content** involves contributions in the form of text, links, photo, or video. The nature of this content varies greatly, from specific details of the live crowdfunding project (e.g., encouraging financial contributions) to topics of interest only tangentially related to the project (e.g., discussions of new stories).

2. **Responding to others' content** occurred frequently on Facebook, usually via text, although occasionally through uploading a photo. These comment 'threads' relate to the original content posted, but do not necessarily remain 'on topic'.
3. **'Like'-ing content** - a project or specific post - shows public support, visible to friends.

More involved ways for backers to show project support include sharing content to groups or private newsfeeds or through generating content: text, photo, or video. The nature of the content varied greatly, from specific details of the live crowdfunding project to topics of interest only tangentially related.

In late 2012 Facebook also incorporated a 'people talking about' value which is a stronger representation of engagement, indicating the number of unique users who have interacted with a given page over the course of a week (Darwell, 2012). 'Like'ing a page on Facebook creates a longer-term exchange, as any subsequent information from that page is then posted to the user's newsfeed, providing regular updates.

Hidden activity on Facebook includes private messaging between creator and backer, as well as use of some Facebook features, such as paying for advertising to help promote the project within the social media channel.

Twitter activity, like Facebook, varies as it may originate from designated project accounts, personal accounts of creators and backers, or from organization pages. On Twitter, one-time actions such as 'favouriting' a tweet create an archive of content.

Other options for engaging with crowdfunding content on Twitter include 're-tweeting' content, which broadcasts information from a Tweet to that user's contacts. 'Following' accounts on Twitter brings all subsequent content from that account into a user's newsfeed, facilitating on-going engagement with content. Similar to Facebook, crowdfunding stakeholders also communicate with one another on Twitter via hidden activity in the form of private, 'direct', messages.

Twitter users not only respond to content; they can also draft their own and Tweet 'at' someone, sharing text, photo or links to other content. Figure 11 shows a particularly active backer posting their own visual content to support the final period of live funding for the Canary in a Coal Mine project, which the project then retweeted to its Twitter followers:



Figure 11: Project backer tweet, and project creator re-tweet

4.2.4 Offline crowdfunding activity

Offline project activity generally occurs in one of two places, dependent upon the nature of the project itself and the backers supporting it:

1. The physical location of the project, and;
 2. Close to the physical location of the project, or to the project creator.
1. **The physical location of the project** is the most common location for offline crowdfunding activity. This activity tends to be initiated by creators, or by those most likely to benefit from the project's output: for example, neighbours supporting local food (e.g., Oranjezicht City Farm), and local citizens wanting to improve local road safety (e.g., Crosswalk Flags).

Being on-site may encourage activity at various points along the crowdfunding

process, such as at kick-off events to promote crowdfunding (e.g., Adopt A Bee), as well as through information-sharing promoting longer-term engagement (e.g., Sarvari):

"We made an inauguration, which was a party concert...there was an event [kick off]. We opened the first bee hotel, we showed people how it looks like and we invite media for it."

- creator, Adopt A Bee

"...we sat around [at the farm] and did lots of talks about the varieties [of potato] and about the various amounts of spray that is used on potatoes."

- creator, Sarvari

Creators referred to offline activity as serving an additional channel for engagement, both preceding and following the live funding. Particularly suited to projects with physical locations, offline activities such as site visits helped to introduce the 'crowd' to the project:

"...we have open volunteer day. People can come up and volunteer and then we have the market where people can come buy food...We did have a sign [announcing the crowdfunding project]...."

- creator, Oranjezicht

Beyond the live funding, offline activities were often framed as crowd appreciation; encouraging continued participation, and helping people to make connections between what they supported financially and the physical output of their support. This helped to foster on-going financial and non-financial support:

"So we had a crowd, we had the input from the crowd, we had crowdfunders' day...."

- creator, Sarvari

"it [live funding] closed middle of July ...and then for the end of August I planned a day out at the farm. I just invited everybody to come out so we could show them the worm farm that we bought, and they all, if they got a little row named after them they could choose the row they wanted, and they had stones with their name on it, and that was good...it was a lot of work, perhaps unnecessary, but for me, for donor relations...the more you build the relationship the easier it is to ask the second time around"

- creator, Oranjezicht

Offline was also used as a site for the coordination of non-financial contributions (e.g., volunteering):

“we have a local business...that has signed up to carry out four volunteering events in the year to do work on the green roof”
- creator, Stevenson Square

“We have Urban Ambassadors...they come and volunteer. We have, let’s see...we have the Boston Cyclists’ Union, they come periodically to do bicycle repairs and tune-ups for free...and then we have volunteer Health Advisors and Community Health Workers at one of our Health Care Institutions that comes as well.”
- creator, Somerville Mobile Farmers’ Market

Offline financial donations towards the crowdfunding project were cited only rarely by project creators.

2. **Close to the physical location** of the project, or to the project creator (local, but not on-site), was activity associated with project promotion and information-sharing:

“through the education work that we do, we are establishing hives in various community places around town – so in parks, and schools, community gardens and urban farms.”
- creator, Beez Kneez

Activity off-site, but in close proximity to project or creator, capitalises on backers bound by an interest in the project. For example, an international slow food community for the farm projects, worldwide bee advocates for Beez Kneez, proponents of organic and non-GMO farming for Sarvari research. Support from these groups came in the form of word-of-mouth marketing and other promotional efforts by creators:

“I’ve always had a pretty strong outreach component to my work, but it [crowdfunding] put on the pressure to really ramp up that outreach component and to go out and share my research with the public in a broader way.”
- creator, Alien Invaders

In this capacity, there was no financial activity, but the sharing of content featured prominently.

Table 14 summarises offline activity across crowdfunding across the five types of activity identified in 4.2.1.

Table 14: Where and what of offline crowdfunding activity

Offline activity	What? (using 5 types of activity identified in 4.2.1)				
	Financial donation	Original content	Liking others' activity	Sharing content	Visiting
1. Physical location of the project	Rarely	Yes	N/A	Yes	Yes
2. Geographically local to the project/project creator	No	Yes	N/A	Yes	Yes, but less common

Project examples commonly featuring offline activity include those with existing physical locations (e.g., art galleries, food outlets) or those with a vested interest in engagement with a local population (e.g., local institution, an established field site). Offline activity also provided media outlets with a way to profile projects (e.g., Defying Dementia, Homicide Watch, Stevenson Square). Table 15 provides further details of offline activity, both public and hidden.

Table 15: Details of offline activity, observable and hidden

Site of activity	Activity (Public)	Hidden activity
Offline	(Local to the project): Providing organised events such as project kick-off, special engagement events (e.g., bake sales), site visits, volunteer days	Interacting through one-on-one offline interactions
	(Close to the project, not immediately local): Organising opportunities for information-sharing such as lectures, educational events	Organising informal events
	Attracting print and televised media	

4.2.5 Cataloguing activities per site

Having broadly discussed locations of crowdfunding activity in the preceding sections, Table 16 details specifics from the four principle sites of activity observed across semi-structured interviews with creators ($n = 28$) and daily monitored projects ($n = 4$):

Table 16: Primary sites of crowdfunding activity: summary of use across research

Site of activity	Categories of activity (as per Section 4.2.1)	Semi-structured interviews with creators, prevalence of use ($n = 28$)	Daily monitored projects, prevalence of use ($n = 4$)
Facebook	Contributing original content; liking activity from another; sharing content; visiting	28/28 creators used Facebook in their crowdfunding projects	4 of 4 projects made use of Facebook (all through a designated project group page)
Twitter	Contributing original content; liking activity from another; sharing content; visiting	25/28 creators interviewed had Twitter accounts, even if 2 of those 27 never used them	4 of 4 projects made use of Twitter
Offline	Contributing original content; sharing content; visiting	24/28 project creators noted the use of offline activity	4 of 4 projects included an offline component
Platform	Financially donating; contributing original content; sharing content; visiting	25/28 creators interviewed used designated crowdfunding platforms	4 of 4 projects made use of a designated crowdfunding platform

Facebook was the most commonly used site of activity, although the manner in which Facebook was used varied greatly. This variation extended across personal accounts and group pages, public communications and private messaging, and connections established during crowdfunding, as well as predating it. Further discussion of the categories of stakeholders during this activity will be covered in Section 4.4.

Twitter was the second-most used social media. Within crowdfunding, Twitter activity could originate through either a personal account (i.e., a named person as the account holder), an organisation or affiliated account; or a project-specific account in the instances where a creator would establish a designated Twitter account for the crowdfunding project.

During the live funding period, Facebook and Twitter were used for comparable types of activity by both creators and backers (Table 17).

Table 17: Online, but off-platform, Facebook and Twitter activity during live funding

Site	Creator Activity	Backer Activity
Facebook	<ul style="list-style-type: none"> • posting original content (text, photo, video) or links to related topics and discussions • liking others' comments and posts • sharing content to other project channels (e.g., Twitter) • initiate private Facebook messages (typically: to those in the friends and family network) 	<ul style="list-style-type: none"> • posting original content (text, photo, video) or links to related topics and discussions • liking others' comments and posts (backer or other creators) • sharing content to personal social media channels (e.g., from project group page to backer's private Facebook page) • 'like'ing the page so all project group page updates appear in newsfeed
Twitter	<ul style="list-style-type: none"> • posting original content or links to related topics and discussions • 'following' backers, as well as organisations and leaders in the field of interest • retweeting tweets of support • @ responding to public support or questions • using hashtags to categorise tweets and make project content more easily searchable 	<ul style="list-style-type: none"> • posting original content or links to related topics and discussion • 'following' the project page so all creator/project tweets appear in newsfeed • retweeting tweets of interest about the project • @ directing content specifically to creator / project account or to other contacts to encourage project participation • using hashtags to categorise tweets and make project content more easily searchable

A crowdfunding platform was used by all but three projects included in research. These three exceptions were projects with pre-existing online to facilitate the transfer of funds, as well as relationships that could support the full funding of projects without need for a platform and its potential wider audience.

Platforms serve the primary function of providing a secure site for the processing of funds. However, depending on each platform's specific features, platforms can also serve as sites to communicate and promote key project information, to embed social media channels, and to engage in discussion with stakeholders.

Other sites of activity also feature within crowdfunding. Table 18 describes additional, more minor sites of activity within crowdfunding:

Table 18: Secondary sites of activity used within crowdfunding

Site of activity	Categories of activity (as per Section 4.2.1)	Semi-structured interviews with creators, prevalence of use (n = 28) ²²	Specific illustration of use
Google Group	Contributing original content; sharing content; visiting	1/28	Facilitating backer-backer communication between those who received project prototypes post-funding
Instagram	Contributing original content; 'like'ing activity from another; sharing content; visiting	1/28	Encouraging backer-generated creativity and content; provides creator monitoring through hashtag use
Pinterest	Sharing content; visiting	2/28	Enabling collating sources of relevance to the project together in one place; connections forged through others 'pinning' content
Reddit	Contributing original content	1/28	Supporting transparent creator-backer discussion and Q&A about the project
Tumblr	Contributing original content; 'like'ing activity from another; sharing content; visiting	1/28	Providing a site for backer 'storytelling' and expression

As an example, the Fingersurfing project – funding the development of mini 'finger surfboards' – made use of Instagram which provided a site for sharing images and short videos from backers around the world who were enjoying the product. Project creators recognised the value of this social media for showcasing their project, and the project Instagram (@fingersurfers) has over 3,200 followers as of 1 March 2016.

²² None of these sites of activity were represented in the monitored projects, excluding them from mention in Table 5.

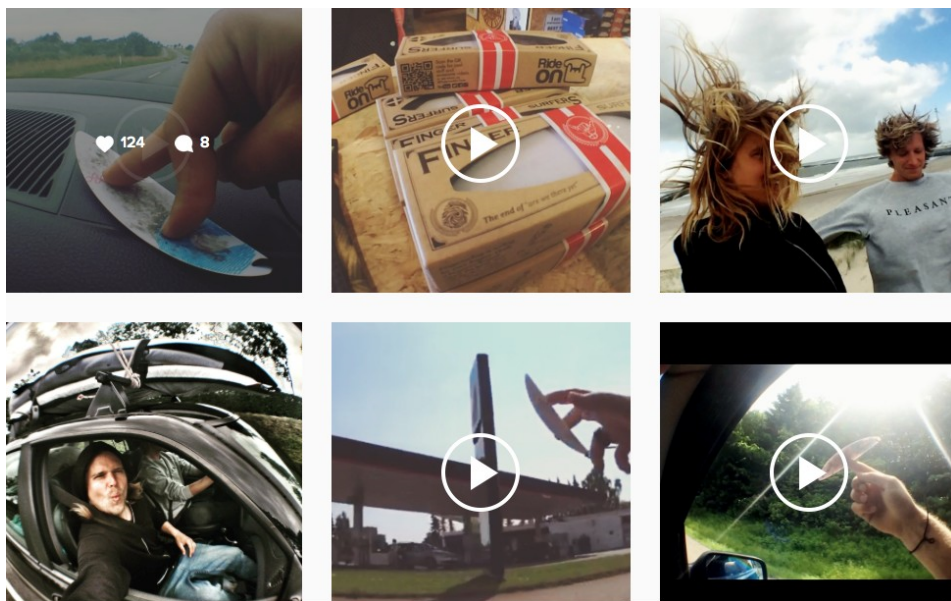


Figure 12: Examples of user-generated video uploaded to the Fingersurfing Instagram account

Further, details of illustrations of use for secondary sites of activity (Table 18) could indicate potential features that platforms or other more popularly used sites should incorporate to support the crowdfunding process.

4.2.6 Online-offline transitions

This thesis acknowledges that online and offline activity are not divorced from one another and, in fact, often integrate similar stakeholders. Transitions of activity are often bi-directional and simultaneous; from on-to-offline, and off-to-online.

Platforms can coordinate online-offline transitions. For example, the crowdfunding platform Thundafund includes a feature enabling projects to recommend ways for backers to get involved beyond a purely financial donation. In the case of the Oranjezicht project (Figure 13) this included guidelines for how to promote the project online, as well as encouraging site visits to the farm.

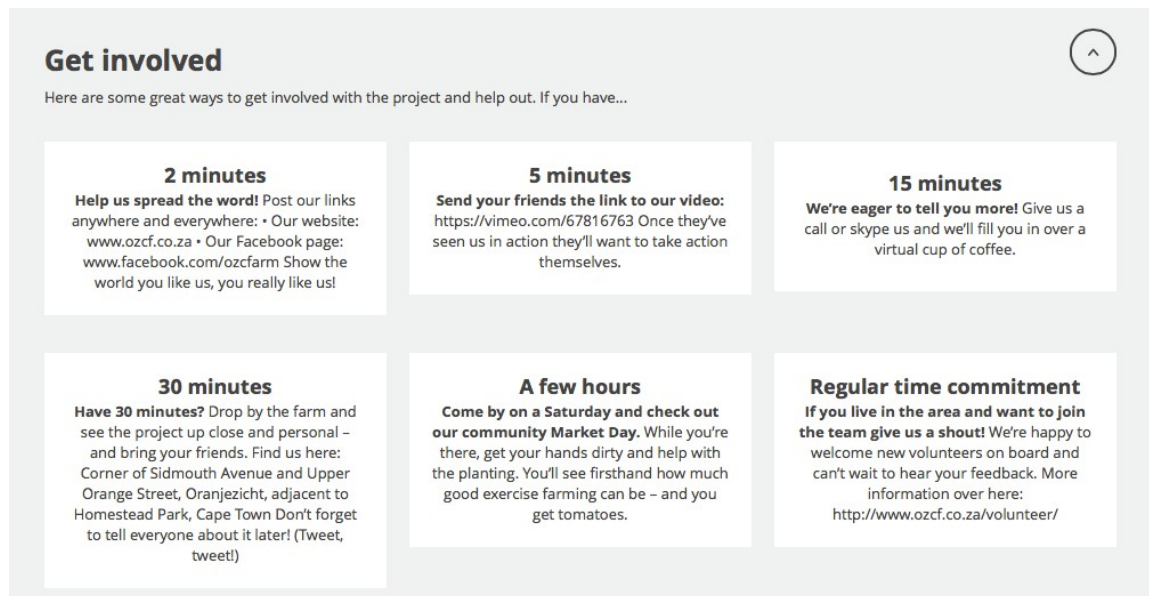


Figure 13: Crowdfunding platform Thundafund²³

This Thundafund feature seems to have had positive influence on site visits:

“If you look at the whole ballpark of people who drop by the farm for 30 minutes...there is definitely a huge volume.”

– creator, Oranjezicht

However, the creator was unable to conclusively state whether visitors to the project site were also making financial donations towards the project.

In the case of Oranjezicht, as well as others researched, although activity took place offline, the coordination of activity occurred online by posting details and encouraging meet-ups. Information sharing occurs across both online and offline channels. In the case of the offline Stevenson Square project launch, the event was promoted online and the update post-event was also posted online:

²³ Thundafund is one of the few platforms to encourage project activity of all types: financial, non-financial, online and offline: (<https://www.thundafund.com/ozcf>).



Figure 14: Stevenson Square offline²⁴ event summarised on Facebook

Offline activity is regularly used in conjunction with online activity, though it can also promote stand-alone activity. Civic projects, those with a shared, public output and, typically, links to a local neighbourhood (e.g., community garden, swimming pool) (Stiver et al., 2015a), are particularly likely to foster offline activity within crowdfunding. Civic crowdfunding is discussed in more detail through the use of Stevenson Square as an illustrative example in Chapter 6.2.6.

4.3 The purpose of different activities

Within crowdfunding, activities often serve complementary, not identical, functions. Most generally, the focus of activity can be categorised by one of two functions:

1. Financial (4.3.1) and;
2. Non-financial (Section 4.3.2).

The final Section, 4.3.3, addresses additional benefits to crowdfunding activity from a creator perspective.

²⁴ The project launch was posted to the Facebook group page of the affiliated organisation, Red Rose Forest (<https://www.facebook.com/RedRoseForest>).

This thesis also acknowledges that some activities have more essential purposes than others across crowdfunding. These are discussed in terms of ‘core’ and ‘non-core’ activities within the context of timeline (Chapter 5.2.1).

4.3.1 Financial activity

Within the context of crowdfunding, financial contributions are those that directly affect the funding goal set by the project creator at the outset. These contributions come in one of two forms:

1. Donation of funds, and;
2. In-kind contributions.

- 1. Donation of funds** are supported by the crowdfunding platform and facilitated by a third party payment processor. In many of the projects considered, a donation is garnered in exchange for a ‘reward’. However, pilot interviews with backers, as well as interviews with creators, suggest that backers were motivated less by the incentive of a reward, and more by feelings of connectedness to either the project or its creator:

“I did donate to both [projects] because I was interested in seeing the projects moving forward, because I thought they were good things to be doing, not just for an exchange or financial reward.”

– crowdfunding backer, G

“I don’t think anybody gave me money because they were going to get a [reward]. So I sort of felt like...the new research [the focus of the project]...I think that’s much more in line with what people were actually giving me money for”

– creator, Climate for Castrators

- 2. In-kind contributions** are those through which goods, or services of value to the project, are given in lieu of funds. As these goods and services have monetary value, they contribute to the financial bottom line of the project. For example, in the case the Stevenson Square project (Figure 15), in-kind gifts included excavation, —installation and maintenance costs with an equivalent value of 22,288 GBP. Although in-kind contributions are not supported by all crowdfunding platforms, they represent a

trend towards acknowledging backer contributions in forms beyond donation of funds.



Figure 15: In-kind gifts pledged to Stevenson Square project on Spacehive.com

4.3.2 Non-financial activity

Non-financial contributions are directly related to the project progression, and yet do not feature transfer of funds or any directly identifiable financial output. Some project creators articulated non-financial goals from the outset:

"The goal of the [project] was to build a community...we live in a neighbourhood where...everyone is behind these walls...[you] go home and you close your gate...there was a sense of community, but there wasn't a lot of exchange."

– Creator, Oranjezicht

In other cases, non-financial activity originated from various stakeholders while the project was in progress. Most broadly, this non-financial activity can be summarised as 'social activity'; research identified important work that was classifiable as networking and promotion. The most significant examples of support are the instances of crowd-generated content (e.g. text, video or photo) used for various purposes including engaging with other backers, sharing personal stories, or providing project feedback. This social activity, demonstrating stakeholder involvement through participation and non-financial contributions to a project, sets the foundation for a consideration of community within the context of crowdfunding. Community is characterised by the co-presence of both an emotional and a behavioural investment in a project, and is discussed in detail in Chapter 6.

Non-financial activity contributes to project development in crucial ways, including; generating support, creating promotional project content, and using positive cues to demonstrate momentum to the wider public. Furthermore, non-financial crowdfunding activity can lead to financial contributions; for example, backers promoting a project via Twitter which was credited with helping at least one project to achieve its financial goal:

“...many of our supporters are Tweeting, or tweet me, or retweeted. Several people didn’t actually give me any money but they tweeted and tweeted and tweeted and that helped a huge amount.”

– creator, Sarvari

The advantages of non-financial crowdfunding activity varied somewhat on the specific nature of the project but, generally, served as important complements to the financial component of crowdfunding.

4.3.3 Creator purpose: beyond the project

This research suggests potential additional value to creators from crowdfunding that extends beyond the project itself, further emphasising both financial and non-financial motivations for crowdfunding activity.

As broached in Chapter 2, the topic of motivations for crowdfunding has been addressed in other literature, specifying extrinsic motivators such as funding, as well as identifying motivations beyond the financial (Mollick, 2014) such as sociability (Gerber et al., 2012). Crowdfunding activity was perceived to have value for creators beyond the project itself, particularly in two specific areas:

1. Networking, and identifying interested audiences, and;
2. Skills building.

Creators articulate that crowdfunding allows the identification of new audiences, and new sites of activity (particularly social media) used for communications:

“[crowdfunding] really maximised the amount of communication online and...that has affected us. I think we do a lot more now by Twitter and Facebook, I think it has given us the impetus because it has helped demonstrate that there is a big audience out there”

– creator, Stevenson Square

- 1. Networking and identifying interested audiences** is important to specific projects, but the identification of new sources of potential support is also important to creators beyond projects. This is particularly true in the case of creators involved with longer-term initiatives, on-going work for which crowdfunding is just one piece, or groups looking for sustained engagement such as non-profit organisations. Crowdfunding simultaneously helped creators to identify audiences, and audiences to familiarise themselves with the project and creator:

“I think that part of the process is that we raised our profile and made many people aware of who we are and what we did which is important for any organisation.”

– creator, Stevenson Square

- 2. Skills building** for creators can be summarised into two principal areas: social media training, and communication. Both skill sets - learning how to use the technologies, as well as how to structure the communications themselves - are crucial to crowdfunding as they help present work in different ways and engage varied audiences.

In terms of social media training, creators range in terms of their pre-existing knowledge. However, research suggests a positive correlation between the size of a creator’s Facebook network and project success (Mollick, 2014), as well as Twitter followers and level of engagement (Interdisciplinary Humanities Center, 2012). Understanding social media is important for crowdfunding creators.

Interviewed creators recognise the value in learning to use Twitter and Facebook throughout crowdfunding; and, as stated by creator of Alien Invaders, to “*learn how to work online*”. Often crowdfunding drove skills development, and led to crucial networking and publicity:

“...doing this whole thing [crowdfunding] pushed me into getting a Twitter account because now I have learned how to use Twitter in a professional capacity...little did I know that there’s whole gigantic ways that people use Twitter professionally and it has turned out actually to be really rewarding and also great at maintaining contacts with supporters...”

– creator, Seahorses

Communication was a common theme across all semi-structured interviews, incorporating a discussion of “public engagement” and “outreach”. Existing research corroborates the importance of communication with an audience to project success (Wheat et al., 2013; Byrnes et al., 2014).

Across interviews, communication related to building communication skills (i.e., learning to communicate across audiences such as media, general public and fellow academics), as well as prioritising communications outreach. Outreach included:

- Writing personalised emails to all 800 Facebook friends about on-going research (e.g., Seahorses);
- Offline efforts such as circulating flyers about research (e.g., Climate for Castrators);
- Volunteering to provide lectures on research (e.g., Alien Invaders).

4.4 The role of different stakeholders in activity

In discussing the range of crowdfunding stakeholders invested in crowdfunding projects, this thesis distinguishes between the following:

1. Creators (4.4.1);
2. Backers, including various types, such as ‘super-backers’ (4.4.2);
3. Crowdfunding platforms²⁵ (4.4.3), and;
4. Beneficiaries (4.4.4).

Identifying the stakeholder behind the activity helps in understanding the motivation for the action and its coordination across stakeholders. The activity discussed is not necessarily true for every crowdfunding project, but represents the range of possibilities across crowdfunding’s diversity.

4.4.1 Creators

A creator is the initiator of a crowdfunding project. The creator is directly responsible for the execution of the project and for beginning, as well as monitoring, its activity. Existing

²⁵ In this case, perspective was obtained through two pilot semi-structured interviews with employees of the platform: one community manager, and one founder.

crowdfunding research acknowledges the activity, the “time and resource commitment” (Gerber & Hui, 2013, p.9), that projects require from creators. The activity-intensive nature of crowdfunding is often unanticipated by creators at the outset of projects:

“..it was all very much scrambling to get it done...just to get it posted. And then to keep track of everything and to make sure that once it closed you delivered all the T-shirts...it was a LOT of work.”

– creator, Oranjezicht

Two types of activity are discussed in the context of project creators:

1. Creator-generated activity;
 2. Creator activity in response to other stakeholders.
-
1. **Creator-generated activity** is prevalent across the preparatory stages, the live funding, as well as, if successful, the post-funding execution of a project.

Predominantly, creator activity is aimed towards presenting and promoting the project. On the crowdfunding platform, for example, creators draft an introduction to their project, summarise their goals and make use of multi media components to promote their vision. Furthermore, creators establish sites for activity including setting up accounts on social media to help broadcast content. Networking is a crucial part of creator activity, as it helps with promotion and relationship-building. Networking involves connecting with both personal and professional contacts. This can take place online, such as following like-minded groups and organisations on Twitter, but can also include offline channels:

“we sell honey off of our bikes at co-ops and restaurants and different farmers’ markets. And then we also deliver to peoples’ doors. So through that we are engaged with all of those retail stages and spaces. So, co-ops and towns and different farmers’ markets...parks, and schools...community gardens and urban farms.”

– creator, Beez Kneez

This preparatory activity is important to crowdfunding projects insofar as it determines how the project will be publicly presented, and sets up preliminary networks of support.

The 'live funding period', (typically 30 to 60 days²⁶), determines whether the project will be funded and, therefore, able to proceed through to execution. Live activity for creators occurs across the sites of activity described earlier in the Chapter: online (on-platform and off-platform) as well as offline.

On-platform, creators serve the role of project leader and point-person, drafting project updates to encourage project momentum (Figure 16):

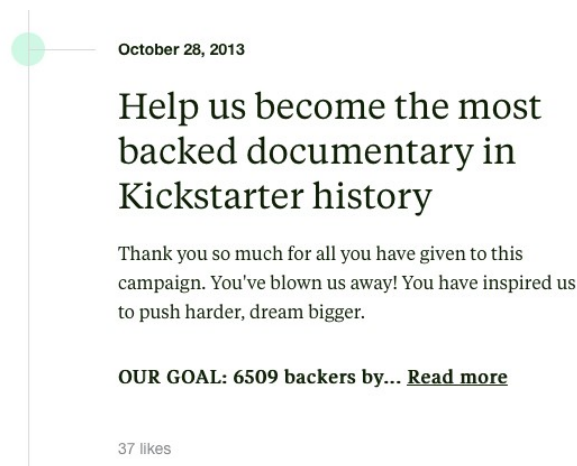


Figure 16: Project update from Canary in a Coal Mine (Kickstarter) posted during live funding²⁷

Off-platform but online, a significant amount of creator activity focuses on networking and cheerleading. In some cases, creators also use connections with more developed online presences (e.g., institutions with established Twitter networks) to do work on the project's behalf:

"I got my College...to tweet about my project...I used to work at [a] Research Institute, I got them to put up on Facebook and Twitter about my project."
– creator, Climate for Castrators

²⁶ Some platforms have no limits on funding period, leaving projects to fund indefinitely. However, most crowdfunding platforms encourage fixed funding periods. In 2011, Kickstarter decreased its funding period from 90 to 60 days based on research that there was a negative relationship between funding length and successful funding (<https://www.kickstarter.com/blog/shortening-the-maximum-project-length>).

²⁷ There is no mandated schedule for project updates, though creators tend to post them during live funding to mark major project developments (e.g., funding hurdles, media mentions, related project events, etc.).

Across interviews, creators tended to be the initiators of this promotional activity with other stakeholders responding to creator-generated content.

If a project is successfully funded, creators have two additional responsibilities for activity; first, delivering on backer rewards and, second, coordinating the successful execution of the project. Communicating with backers through on-going updates was a significant portion of this activity:

“we’re slipping deadlines horribly, but we’re having very regular updates regularly and we’re telling them about the process. Some of the things you saw in the comments, the packaging for instance, it’s very important to get in front of comments, in front of negative energy and criticism before it balloons into something that catches peoples’ attention”

– creator, XOAB

2. **Creator activity in response to other stakeholders** is common creator activity, particularly in the case of addressing feedback and answering questions pertaining to the project. This is crucial activity for a creator to engage in, as it can influence a would-be backer’s choice to donate to a project. For example, in Figure 17, a would-be backer shared questions and concerns about the project and its on-going maintenance to the project Facebook page, prompting the creator to respond:



Figure 17: Backer-creator Facebook exchange during live funding

During post-funding project execution creators are particularly called upon to respond to backer queries about delivery of rewards and project timeline:



Figure 18: Fingersurfing creators responding to comments on the crowdfunding platform

Notably, platforms also recognise the range of responsibility and related activity that creators have over a sustained period of time. In response, most platforms offer 'how to' guides for creators, focusing on where they should target activity to maximise success²⁸.

²⁸ Kickstarter's 'Creator's Handbook' is a detailed illustration of a creator-focused crowdfunding guide featuring tips on project components, and a particular focus on social media activity (<https://www.kickstarter.com/help/handbook>).

4.4.2 Backers

Backers are crucial to the success of crowdfunding; without backer activity not only would crowdfunding projects not secure funding, but they would also be without an audience, a group of engaged networkers and promoters, or a community of support.

This section:

1. Identifies different types of backer groups, and then;
2. Discusses the range of backer activity.

Backer groups within this thesis are identified as follows:

1. Friends and family;
2. Supporters of the project or research behind the crowdfunding;
3. Previous supporters of the project or its creator;
4. Super backers;
5. Reward seekers, and;
6. Platform 'passers-by'.

Not all backer groups are represented in every crowdfunding project, and a single backer may fit into several groups simultaneously. For example, friends and family can also be motivated by project reward. These backer groups occur in varying combinations across projects:

"[t]here are many communities [of backers], but they are kind of...they all reflect some aspect [of the project]."

– creator, Food to Farm Desert

Outlining these distinct categories provides insight into different backer motivations and, relatedly, different backer activity. Identifying backer groups foreshadows an in-depth consideration of groups of backers positioned as community within Chapter 6:

1. **Friends and family** are a category of backer acknowledged in existing crowdfunding research (Agrawal et al., 2011b). This group behaves differently than other categories of backers insofar as they are motivated by personal relationships and connection to the creator. Importantly, this group of backers often makes up the first wave of financial contributions to a project (Agrawal et al., 2011b).

This support is often divorced from any interest in the topic area of the project, or motivation to secure the reward. Friends and family provide funds, emotional support (e.g., Facebook posts of encouragement), as well as promotional help online as well as offline (e.g., circulating project link to their networks). However, this research suggests that substantive backer-generated content does not originate from this group.

2. **Supporters of the project** or the research behind it represent a common group of crowdfunding backer. Interviews with creators suggest that a significant number of backers are motivated by support for the work of the project. This support can have various points of origin:

- philosophical: backers supportive of projects promoting their values, e.g. GMO-free, organic agriculture (e.g., Sarvari), local farming (e.g., Oranjezicht, Food to Farm):

“they [backers] like to support things not-for-profit, they like to support land-based projects and projects about growing sustainable food, organic growing, all of that kind of stuff”

– creator, Sarvari

- local: backers interested in supporting a project in their vicinity; e.g. Boston residents wanting to give back to their city through supporting Somerville Mobile Farmers’ Market:

“...we do know that people in other states contributed to it [crowdfunding project]. With that said, I think probably the majority of people were from Somerville: businesses that put some money into it, and individuals, and also partners that supported our work.”

– creator, Somerville Mobile Farmers’ Market

- professional and interest-based: backers familiar with the work of the project in a professional sense or through personal interest, and looking to contribute to its progression (e.g., Alien Invaders):

"I did some reaching out to Local Action Groups... I had quite a few donors come through, including one total stranger who was a land manager from Minnesota who donated \$250 which was a big deal – that's a lot for a total stranger to give to a total stranger."

– creator, Alien Invaders

3. **Previous supporters** of the project or its creator also made up a category of backer.

Crowdfunding is often part of a larger project or piece of research, (e.g., You Should Totally Meet, an app already developed but requiring crowdfunding for further development), or affiliated with an established initiative that already has an interested group of supporters (e.g., Oranjezicht, where crowdfunding was to help fund the farm that was already in place). Successful crowdfunding in these cases does not necessarily hinge on recruiting new backers, but on engaging existing channels of support in new ways:

"[crowdfunding] was a good way to get in touch with the people in our community. Probably 95% of the people who gave were people in the neighbourhood...when I say that they were already in contact with the Farm..."

– creator, Oranjezicht Farm

4. **'Super backers'** are a type of backer revealed through research. These are backers who contribute considerably, and often repeatedly, to a project. These backers were involved either in several sites of activity or at several time periods across the project progression. The form of contribution varied, but these backers were identified as those who went beyond funding, often contributing both financially and non-financially to a project (Figure 11).

These backers could be from any of the three backer groups just described. The examples provided through creator interviews suggest a greater likelihood that super backers emerge from categories that have a specific emotional investment in the project, such as friends and family, or previous supporters of either the project or the creator:

"I have a very supportive "family community"...it's not necessarily people that I'm directly related to, but the people that are part of...my "family" from home, and that increased network"

– creator, Climate for Castrators

These super backers contribute to non-financial activity. Although a small sample within the assessed crowdfunding projects, these super backers brought acknowledge advantages to projects and their creators. This includes actions with cost-saving results for creators, such as free consultation in the form of feedback, or costs saved with backer-generated promotion. In the Sarvari project, a super backer offered *pro bono* legal services. Super backers also provided targeted, detailed feedback, such as in the case of the Reactive Grip project. Although the project did not reach its funding goal, backers on the platform provided extensive feedback for the creator through use of the comments, helping to direct the creator towards development of the product prototype and advising on future iterations of the project.

The following two types of backer group – reward seekers and platform ‘passers-by’ – featured less prominently in creator interviews.

5. **Reward seekers** are those backers motivated to participate in a project due to the rewards offered. In the case of XOAB socks, backers who pledged funds early received an “early adopter” discount of two pairs of socks in return for a donation of \$45. In such instances, backers seemed motivated by the urgency of the ‘pre-sale’ and financial ‘deal’ of the reward in relation to the donated amount.

Other backers were motivated by rewards that would be unobtainable without crowdfunding contribution (e.g. TouchKeys whose keyboards were available to backers at a certain level of donation during crowdfunding, but not otherwise for purchase commercially). This was true in the case of new technology gadgets such as the haptic game controller (e.g., Reactive Grip) and the musical sensor kit (e.g., TouchKeys) where the prototypes were not available elsewhere. These backers, as illustrated in the image below for TouchKeys, paid a significant amount to donate and receive a physical kit.

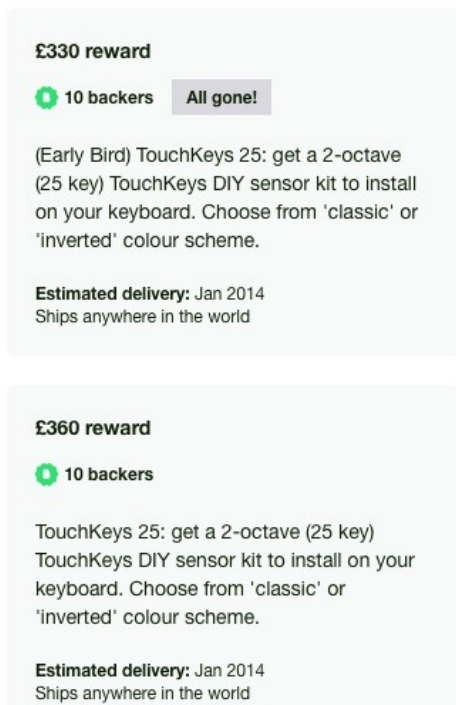


Figure 19: TouchKeys' Kickstarter project: sample of rewards

6. **Platform 'passers-by'** are a potential backer group for each project. In several cases backers came from within the larger community of people visiting a crowdfunding platform. These were backers who were previously unaware of either the project or the creator. In this case, the projects attracting backers with no pre-existing connection were those hosted to larger, global crowdfunding platforms such as Kickstarter:

"Kickstarter and its bigger reach was really what we wanted."

– creator, Beez Kneez

Within this research, the influence of platform 'passers-by' on project results was specifically illustrated through a Kickstarter platform feature: Staff Picks:

"...[we were] the pick of the staff of Kickstarter, which is a big deal that they like us"

– creator, Food to Farm Desert

Staff Picks are projects chosen by Kickstarter staff and highlighted on the front page of the site and in emails to all Kickstarter account holders. Three projects included in

this research were listed as Staff Picks on Kickstarter: Beez Kneez and Fingersurfing (both funded in 2013) and Food to Farm Desert (funded in 2014)²⁹:

“there was those people who just happened to be backers for Kickstarter, and just finding us [that way].”

– creator, Food to Farm Desert

The backers who came to crowdfunding projects as platform passers-by tended to be widely geographically dispersed:

“...another whole chunk of people found us through Kickstarter. And we got some donors, backers, from places like Singapore and the Netherlands and all these places that we weren’t connected to already.”

– creator, Beez Kneez

These backers also provided important new audiences for the project:

“We didn’t have any [community] before the project!”

– creator, Fingersurfing

Given the range of backer groups, activity generated is similarly diverse. The most consistent backer activity is donating funds to the project. Three further types of activity were common to backers:

1. Promotion;
2. Feedback, and;
3. Volunteering.

1. **Promotion** of projects was facilitated through online and offline backer activity. This could be both intentional, such as by friends and family posting flyers. Promotion could also occur more subtly, such as in the case of backers commenting in social media threads thereby popularising discussion within others’ feeds.

²⁹ Recent discussions suggest that Staff Picks to do not have the impact on financial bottom lines of projects that they once did; in part due to changing platform features, in part because of the decreasing novelty of crowdfunding to the public: (https://www.reddit.com/r/kickstarter/comments/2getd1/what_it_means_to_be_a_kickstarter_staff_pick/).

2. **Feedback** provided to creators by backers, particularly those with a shared topical interest in the crowdfunding project, serve as a 'focus group' with a vested interest in project success. Related activity includes specific comments assisting creators with funding or specific details of their projects, tailored questions to help avoid any project pitfalls, and suggestions for how to proceed beyond live funding.
3. **Volunteering** is a form of non-financial contribution by backers. Volunteering was particularly articulated in the case of projects with offline physical sites or designated events. Backers volunteering to help with crowdfunding activity or project implementation have the potential to continue their relationship extend long beyond the funding period, such as in the case of Stevenson Square with on-going maintenance and backer-based initiatives:

"those [backers] around the Square...they get a direct benefit from working and living there. They were the ones who put their hands in their pocket....."

– creator, Stevenson Square

4.4.3 Crowdfunding platforms

The importance of the crowdfunding platform cannot be minimised; Chapter 1 stated that it is one of the key elements differentiating contemporary crowdfunding from other fundraising models. Overwhelmingly, creators reported being satisfied with their choice of platform and their ability to use it for the benefit of their project. No creator interviewed expressed regret at their choice of platform. Principal points of satisfaction related to user friendliness and various platform supports:

"I found the experience of working with [the platform] to be really great. They were really helpful with any kind of logistical issues or anything like that; really quick to respond, really great."

– creator, Alien Invaders (re: RocketHub)

"I think they [platform] did a really good job; it looks clean, and they really guide you through the process of setting it up. Lots and lots of help. If you have a question, I could reach four of them individually ..."

– creator, Surviving the Savanna (re: Experiment)

"it [the platform] was relatively easy use...I wouldn't say it's the slickest, most intuitive interface. [but] I think anyone could probably do it."

– creator, You Should Totally Meet (re: Indiegogo)

Crowdfunding platforms themselves are not the focus of this research, although pilot interviews were conducted with a community manager (n=1) and a founder (n=1) of a platform. This choice was due to issues of access, and to wanting to address creators generally and not only those using specific platforms. However, this thesis acknowledges that platforms are often the nexus of crowdfunding activity: initiating activity, as well as sustaining involvement to varying degrees throughout the project process. Three specific roles of platforms are:

1. Platform as funding infrastructure;
2. Platform as engaged cheerleader, and;
3. Platform as extending beyond the platform and live funding.

1. Platform as funding infrastructure: the vast majority of creators included in this research elected to host their projects on a designated crowdfunding platform³⁰. The most common reason cited for use of a platform was the ability for platforms to provide an infrastructure for crowdfunding:

“the framework is there [with a platform]. And that’s all it is, really, is a framework. And it’s built in to this big network of folks who are plugged in to it [crowdfunding].”
– creator, Beez Kneez

This function was echoed by platforms themselves:

“We provide the platform, and we provide tools on the platform for people to promote their project”.

– Community manager, Spacehive

Creators were able to use the platform-specific online guides to set up projects³¹, and platforms provided a specific site and structure within which to do so. This was generally seen as a straight-forward process:

³⁰ Only three projects (Adopt A Bee, Lucia, Sprint for Shakespeare) chose to fund without using a platform. While one of these creators specifically cited the platform fee as a reason for independent crowdfunding, the shared consensus of these creators was that they could reach their funding goals within their existing networks, eliminating need for a platform.

³¹ Indiegogo, for example (<https://www.indiegogo.com/campaigns/new>).

"yeah, it was easy [posting to the platform]! We just, we gave all the stuff, wrote the stuff, made the video, gave it to [platform], they posted it."

– creator, HiSBE

There was minimal interaction cited between platform and creator when the former served as a structure for infrastructure. Points of interaction were predominantly related to specific queries during live funding:

"I remember we [creators] were looking for a certain update button and were, all four of us on the phone, and we emailed them [platform] and...it was fine."

– creator, You Should Totally Meet (re: Indiegogo)

"[platform] staff is great...any questions I had were very quickly answered by them. and if somebody was having trouble, they would speak directly with them, and would phone them up"

– creator, Sarvari (re: Buzzbnk)

2. Platform as: engaged support during funding

Platforms have a financial interest in hosting successful projects given that they collect a percentage of funds raised by creators³². Platforms have the ability to offer additional support to creators; such as boosting morale through encouragement and publicity (e.g., promoting projects across social media) or even providing financial resources (e.g., occasionally contributing their own funds to support projects). This research suggests that 'extra' help from platforms and its employees is related to the size of the platform, and how well- established it is.

According to creators interviewed, smaller, newly established platforms were more likely to provide engaged and attentive support, as a project success provided good marketing for the platform and an occasion to test their processes:

"[our project] was actually the first successfully funded project on Citizinvestor, so I think that gave us a lot of good exposure, because Citizinvestor was there, trying to gain more of an audience, and get some publicity, and by doing so they are sharing that with us, because we were the first successful project."

– creator, Connecting Blind Children With Tech (re: Citizinvestor)

³² This is a common funding structure, though percentage values vary. Also increasingly, specialised, or smaller, platforms (e.g., civic crowdfunding platforms) are waiving the fee.

"I think part of this is still just because they [Experiment platform] are just starting up as a company. So they are able to give such attention to individual users. If they really take off and are the next Kickstarter for science, I imagine that that really personal interaction might disappear due to just pure time constraints. But as of now I think this is the perfect time to do an Experiment campaign; they're just starting up but have all the logistics and all the infrastructure established."

– creator, **Surviving the Savanna** (re: Experiment)

Creators shared the direct and indirect methods by which platforms contributed to the financial success of their projects:

"...we were one of [the platform's] first...first four or five projects, it was really early on in their process. So they really helped us on board, it was great... a lot of our success came from the [platform's] team efforts [...] people, more people from their network than from ours. We definitely tried to do what we could, in terms of having hands-on social media....but they [platform] have a much bigger network on social media platforms."

– creator, **Connecting Blind Children With Tech** (re: Citizinvestor)

"...they [platform] publicised it as well. So they would [post it] to their blog page, their Facebook page, and their Twitter feed, and they would pick a project a day and highlight it."

– creator, **Climate for Castrators** (re: RocketHub)

"...at the time...most of the projects were not 25,000 dollars, so I think they also had a vested interest in having us successfully raise that amount of money.

[...]

I really liked that also [some of the backers are employees of the platform]"

– creator, **MyHealthEd** (re: Microryza)³³

Creators appreciated this support from platforms for its influence on project results.

Those creators who did not receive as much support from platforms lamented its absence:

"the only thing that I would have liked to see more of is [the platform] itself pushing it [the project]. But [...] that was kind of missing, I think, they could have helped with pushing it for us."

– creator, **HiSBE** (re: Buzzbnk)

³³ This project was funded when the platform was called Microryza; it is now known as Experiment.com, and archived project material is accessible on the latter.

Larger platforms, such as Kickstarter and Indiegogo, have employed ‘community’ teams with structured channels and points of support. Community managers address on-site queries, IT to social media coordination, and also serve as:

“...first point of contact for emails coming into our system, whether that be for potential funders, or people wanting to know about us, or wanting an interview, all background stuff”

– Community manager, Spacehive

Larger platforms commonly encourage projects towards success by highlighting specific current projects on the platform landing page as well as across the platform’s social media. In the case of Kickstarter, projects benefitted considerably from increased audiences, (and consequent financial activity), resulting from being named a ‘Staff Pick’ (Figure 20).

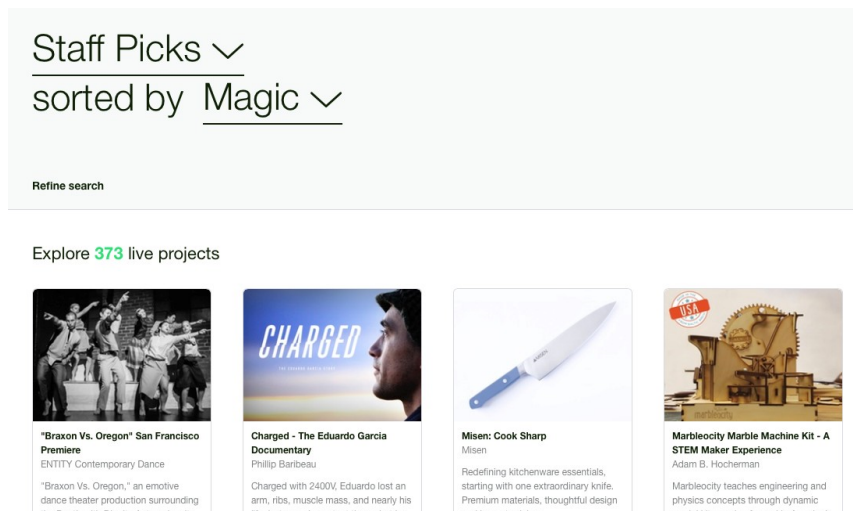


Figure 20: Kickstarter Staff Pick landing Page

This is an example of a platform feature that significantly benefitted projects:

“It was a huge shot to be ‘Staff Pick’ on Kickstarter, and then it [project] really grew from there.”

– creator, Fingersurfing

“we never got that [international] coverage before...these were not alums, these were people who were [following] the pick of the staff of Kickstarter...”

– creator, Food to Farm Desert

In addition to ‘Staff Pick’ selections; Kickstarter highlights projects through “Project of the Day” and a newsletter showcasing “Projects We Love”. The Kickstarter Blog

provides tips to creators on how to catch the platform's attention and maximise chances of being featured³⁴. Platforms must invest in developing and maintaining these features, which may explain why smaller platforms are less likely to have comparable services.

Generally, platform features encourage outward-facing activity. It is common for platforms to incorporate 'one-click' options to share project information with social media, or to embed the project page within other websites, or to email links (Figure 21). Specific platform choices affect activity in subtle ways. For example, although most platforms have a place to leave comments on each project page, contributing to comments threads can be limited to those who have already pledged a financial amount, or anyone who has a registered account (including sharing personal information) with the platform.

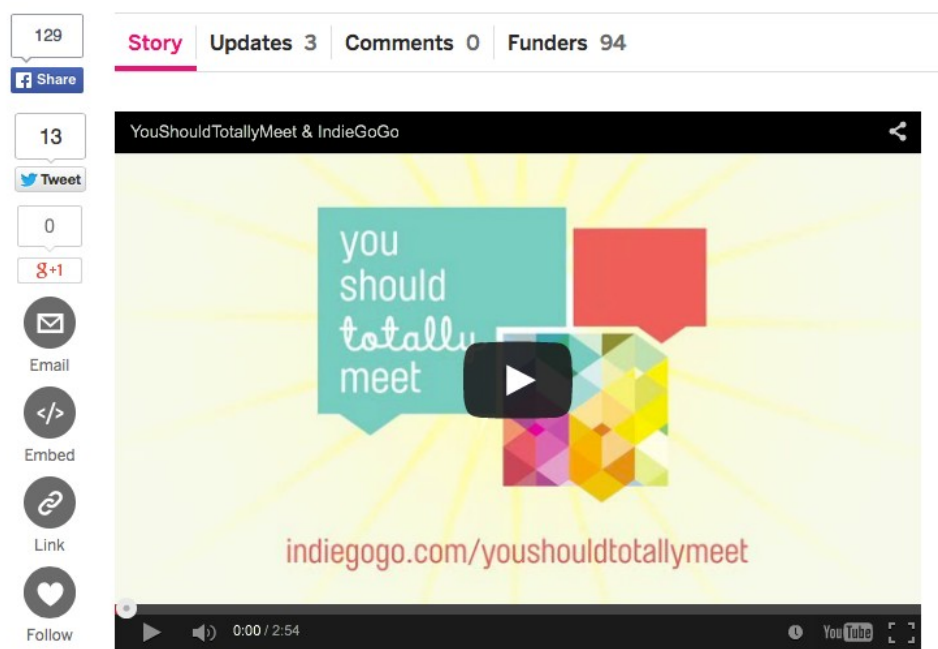


Figure 21: You Should Totally Meet Indiegogo project page

³⁴ Promotion is an important part of crowdfunding; highlighted projects on Kickstarter are posted here: (<https://www.kickstarter.com/discover/recommended>), and the platform blog advises creators how to increase chances of this type of exposure (<https://www.kickstarter.com/blog/how-to-get-featured-on-kickstarter>).

3. **Platform as: facilitator of activity beyond funding, and even beyond the platform:**

there is underdeveloped potential for crowdfunding platforms to take on the role of facilitator of, or partner in, activity. This role for a platform can extend beyond the live funding period, or even the platform itself.

Three illustrations of extended purpose of a platform include:

1. Identification of media contacts;
2. Coordination of in-kind gifts and volunteers, and;
3. Acknowledgment of crowdfunding's broader influence.

Identifying media contacts and helping project creators with promotion showed platform awareness of the importance of publicity and networks:

"Experiment had a section where it could help you look up media contacts that were related to your field... I did really like that aspect of the Experiment website...in the Experiment platform, it had something built into it that could help you with outreach and awareness raising for your project."

– creator, Seahorses

In-kind gifts and volunteers also demonstrate platform recognition of crowdfunding contributions beyond the financial. By facilitating in-kind gifts towards projects (Spacehive), and coordination of volunteers (ioby), platforms recognise the value of relationships forged during crowdfunding that may extend beyond the live period, and even the platform itself. Some of these platform features will be described in more detail using the context of civic crowdfunding in 6.2.6.

Platforms also have the potential to engage with the broader implications of the crowdfunding movement, rather than individual projects. For example, as of September 2015, Kickstarter is a public benefits corporation³⁵, meaning that, while remaining profit generating, the platform is also using crowdfunding to make certain social and environmental commitments to society at large. Interestingly, this includes

³⁵ This information was first outlined in detail on the Kickstarter blog (<https://www.kickstarter.com/blog/kickstarter-is-now-a-benefit-corporation>).

a pledge in its revised Charter³⁶ to enact a “positive impact on society” including work beyond the platform and its projects (Charter 1.3: “Kickstarter will engage beyond its walls with the greater issues and conversations affecting artists and creators.”). Although it is too early in the development of these areas to draw conclusions about their influence on the field, these examples do align with several core themes of this thesis, such as the longer-term potential of crowdfunding, its value beyond a tool for funding, and the opportunity for on-going relationships beyond the funding itself.

4.4.4 Other beneficiaries

Some crowdfunding projects have an additional category of stakeholders; ‘other’ beneficiaries. These stakeholders may make not contribute towards funding, but benefit from the crowdfunding project, either through the final output or the social engagement occurring alongside. Project beneficiaries are both not present in all crowdfunding projects and challenging to identify. As a result, these beneficiaries feature as a secondary category within this research. Other beneficiaries are most common in civic and social good projects, where crowdfunding projects often focus on communities in need who lack technological access or financial resources to contribute:

“many of the people that we serve don’t have access to the internet, don’t have smart phones, so...reaching them through the internet or online is not the most effective strategy.”
– creator, Somerville Mobile Farmers’ Market

“we actually got some criticism of, “too many people outside of DC are funding this, and not enough people in DC want it”. Which very quickly we set the counterargument which is “again, our core audience has lost, basically, everything at this point, and you want to ask them to give more? Really? Is this the moral high ground you want to stand on?”.”
– creator, Homicide Watch

Beneficiaries can impact project development, through being active on social media and indirectly helping with project promotion.

³⁶ The Kickstarter Charter is published in full on the platform (<https://www.kickstarter.com/charter>).

In some projects the differentiation between backers and other beneficiaries was possible by site of activity:

“On Facebook, many of our followers tend to be our participants, and those are people who do not give, are people with very low incomes. But on Twitter, I feel like many of our followers are other organizations or people who are interested in what we do...”

– Connecting Blind Children With Tech

4.5 Summary

By detailing the specifics of what, where, why, and who of activity, this chapter also uncovers *how* crowdfunding activity is characterised.

Figure 22 builds on Figure 5 from the outset of the chapter, adding key insights:

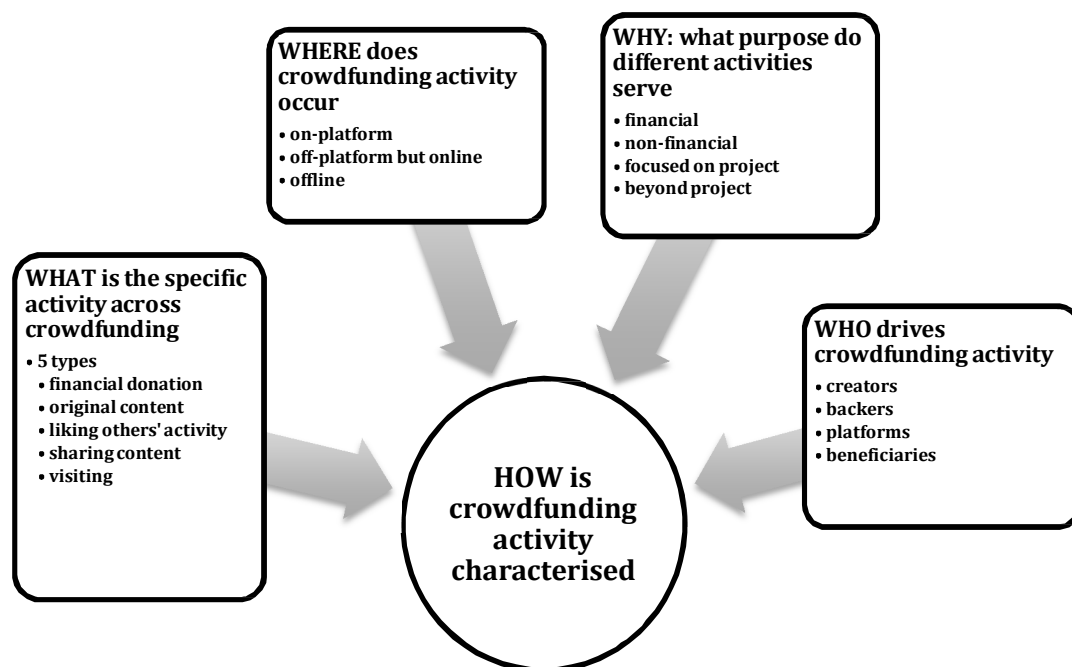


Figure 22: The *how* of crowdfunding activity: flow of insights

Specifically, this study of activity identifies the extent to which activities do not occur in isolation. Therefore, the ‘how’ of crowdfunding can be understood as a choreography of activity, involving different actions, across various sites, with different stakeholders, for varying purposes. Although there are consistent themes (e.g., creator activity on a

platform), this chapter also highlights cases in which project personalisation can occur through activity, such as engagement with certain sites (e.g., Instagram) to suit the project or its projected audience.

By systematically cataloguing activity across crowdfunding with detail, this chapter makes implicit crowdfunding actions explicit. Through doing so, this chapter enables the study of the full range of crowdfunding activity, as well as its application towards maximising success of future projects.

In identifying activity and consolidating a discussion of sites, purposes and stakeholders, this chapter sets the groundwork for uncovering how crowdfunding works, as well as for the subsequent chapters. Chapter 5 expands further on the idea of a choreography of activity through the lens of crowdfunding timeline. Chapter 6 continues discussion of stakeholders involved in activity by uncovering the concept of community within crowdfunding. Finally, Chapter 7 addresses how creators might maximise project success through specific knowledge of crowdfunding activity and its outputs.

Chapter 5: When crowdfunding activity occurs - the importance of timeline

5.1 Introduction

Across semi-structured interviews, creators described the progress of their crowdfunding projects within the context of a timeline. This chapter proposes timeline as a central means by which to understand crowdfunding activity, answering:

How does timeline influence crowdfunding?

In addressing this question, distinct periods across the crowdfunding process are identified: three periods of activity, and two ‘transitional’ periods (5.2).

To build on the activity catalogued in Chapter 4, discussion continues by placing specific activity, and its corresponding purpose, along the five time periods identified (5.3).

Table 10 (3.6.2) provides additional detail pertaining to the specific research methods used to answer these questions.

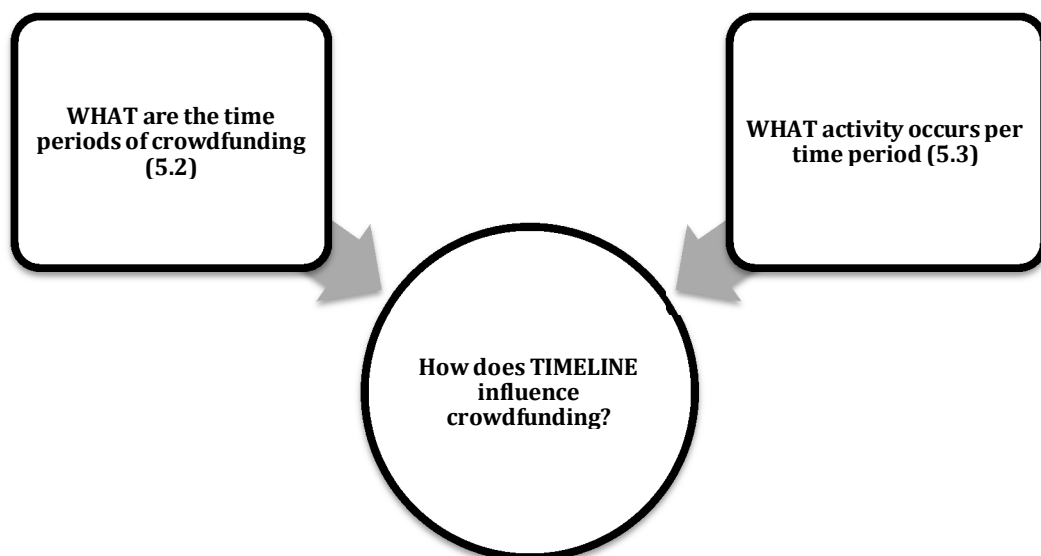


Figure 23: Chapter 5 flow

5.1.2 Timeline within the context of crowdfunding

As a process dependent upon a series of steps, crowdfunding features a natural chronology and an associated structured timeframe. Crowdfunding projects have a distinct beginning, middle, and end.

Timeline, in the context of this thesis, refers to the linear progression of crowdfunding time periods; this is common to all crowdfunding projects. Time in this case does not refer to a fixed amount, or to a set schedule.

This research identifies five distinct periods to the crowdfunding timeline – three action and two transition periods - and also places them in relation to one another, illustrating that there is an order to periods, and a logic to the crowdfunding timeline as a whole.

5.2 Crowdfunding time periods: an introduction

Across all semi-structured interviews, creators responded to a general prompt of *“how did your project come about?”* with an understanding of an expanded crowdfunding timeline, describing project activity both preceding and following the live funding period. Uncovering this common understanding of crowdfunding as experienced by creators supports the hypothesis that crowdfunding has an extended timeline.

5.2.1 Three + two periods of activity and their significance

Although the projects included in research varied significantly in terms of factors such as length of funding, scale and creator experience, the following periods were evident:

- Pre-funding;
- Live funding, and;
- Post-funding period.

As well as two transitional periods, from:

- Pre-to-live funding, and;
- Live-to-post funding.

Transition periods have a different momentum, and a shorter time frame, than the other three periods. Transition periods are also not necessarily distinct, as Figure 24 shows, serving as a bridge between activity periods.

In existing research, Macht and Weatherston (2015) identify pre-investment and post-investment periods to crowdfunding. Pre-investment involves preparatory work, which is also recognised by Hui et al. (2012, 2013, 2014b). The post-investment crowdfunding period acknowledges the importance of delivery on rewards (Hui et al., 2013) as well as longer-term relationship development (Gerber and Hui, 2013), which can help creators in subsequent projects (Boeuf et al., 2014). Although these pre-investment and post-investment periods align with those described in this chapter, this thesis appears to be the first to map out the full timeline of crowdfunding with detail, including transition periods of activity.



Figure 24: Three+two periods of crowdfunding

The five time periods identified in this chapter were determined by creators' reporting of activities and their related timeframes. Creators' accounts of project activity were coded in NVivo (Table 19). Through identifying clusters of activity it was revealed that different activities occurred at different times to serve different purposes.

Table 19: Number of sources and references to time as coded in NVivo.

Time period	% of creators referring to the time period	# of references to the time period
Pre-crowdfunding	73	124
Transition 1: pre-to-live	67	67
Project live	97	200
Transition 2: live-to-post	67	112
Post-crowdfunding	83	202

This section will briefly introduce each of the five periods, in the order in which they occur:

1. Pre-crowdfunding;
2. Transition pre-to-live crowdfunding;
3. Live funding;
4. Transition live-to-post crowdfunding, and;
5. Post-crowdfunding.

1. **Pre-funding** varies greatly in length depending on the project and the creator. Some projects were initiated and immediately crowdfunded (e.g., Fingersurfing), whereas others formed part of a larger project or initiative long pre-dating crowdfunding (e.g., Oranjezicht). The pre-funding period therefore not only incorporates the period immediately preceding the transition into live funding, but also preplanning such as making connections through local networks:

"We had, by that point [crowdfunding], spent nearly two years, well, 18 months, working on a blog and building up a really good following on-line on social media..."

– creators, HiSBE

Pre-funding does include, however, activity directly related to crowdfunding, such as speaking to contacts, assessing options, and evaluating use of different platforms:

"...my Professor and now Faculty Advisor suggested looking at [platform] Microryza [now Experiment]. And she had heard of it from other colleagues...And it fit really well and after having conversations with the co-founders they were like "this sounds great, we're ready to work with you" and so we ended up launching..."

– creator, MyHealthEd

"Buzzbnk [platform] stand out for us because they support only social enterprises and charities..."

– creator, HiSBE

2. **Pre-to-live funding** represents the period of time between preparation for the launch of the crowdfunding project and the beginning of live funding itself. As Figure 24 demonstrates, this transitional period may overlap with the time periods preceding and following. There are two distinctive characteristics of this transition:
 - i. A notable increase in activity, and;

- ii. The nature of the activity itself which is directly focused on the crowdfunding project and securing funding:

"We started by emailing a list we have of people who are, I would say, more invested in [the project] than the average Facebook fan. Because we wanted to get a sort of critical mass of funders and a good chunk of the campaign fulfilled before pushing it on social media. Just because I think that makes people think that you're joining a winning team."

– creator, Connecting Blind Children with Tech

3. **Live-funding** features the densest concentration of activity. This period focuses heavily on funding and related promotional activity. The demarcation point for this time period maps to the beginning and ending of the funding period. As all funding occurs during this period, creators noted a significant amount of harried activity around it:

"I was like "ok, this project goes live and I am going to pull my life together now", so...I don't remember much. It was a blur."

– creator, Of Monks and Men

"...it was so time consuming! Even though I was working full time I was only working 40 hours a week, so I left the office at 5 and then took hours for writing press releases, and reaching out to others...we wouldn't be able to feasibly do this [crowdfund again] without additional support..."

– creator, MyHealthEd

Although lacking formal structure or coordination, this sense of intense activity further emphasises the value of this thesis in identifying creator supports and strategies.

4. **Live-to-post transition** mimics the pre-to-live funding transition. As with the preceding period, there is a heightened sense of activity during this time. Whereas some activities pertain to the close of live funding, others are focused on the transition away from funding and towards project administration and execution. Activity is still primarily related to the live period itself, as well as the immediate aftermath of delivering on the rewards promised during the live period.

"...we tried to keep people updated with where things are at, with the project, and the business. And honestly, we were pretty late...so wanted to keep them in the loop about what we were doing instead, you know?"

– creator, Beez Kneez

5. **Post-funding** varies across projects, dependent upon whether the project was successfully funded during the preceding period. Activity tends to cease altogether in this period for the few unsuccessfully funded projects that were studied.

However, most of the projects were overwhelmingly successful, and these will be the focus of the post-funding discussion. If the crowdfunding project continues on as a larger project or as on-going business, there is no firm way to measure the 'end' of this period. However, there are two distinct sections to the post-funding period:

- i. The time immediately following the live project, and;
- ii. The longer-term implications of the crowdfund in terms of project execution, sustained impact and recognition:

"It kind of blows my mind; it [crowdfunding] was one thing I did 2, 3 years ago. And it's something I'm known for..."

– creator, Climate for Castrators

This longer-term period helps to develop relationships:

"I think it was a month later [after live funding] where we had this [crowdfunding] day at the farm...we thanked people in person, if people wanted a coffee we bought them a coffee. And even though those were existing relationships, they helped to grow and solidify those relationships"

– creator, Oranjezicht

In addition to being distinguished by a specific time, each period of crowdfunding has specific aims and corresponding activities. This thesis distinguishes between 'core' and 'non-core' activities:

- **Core activities** are common to specific crowdfunding periods and associated with project success (e.g., use of Facebook);
- **Non-core activities** are those less integral to success, or less commonly occurring across projects. Non-core activities may still prove important to crowdfunding projects or to the larger initiatives of which crowdfunding is a part. However, as non-core activities are less standardised project to project, they are also less traceable for their influence on funding success (e.g., use of a less used social media channel, such as Vine).

Figure 25 outlines specific purposes per time period across crowdfunding, in chronological order:

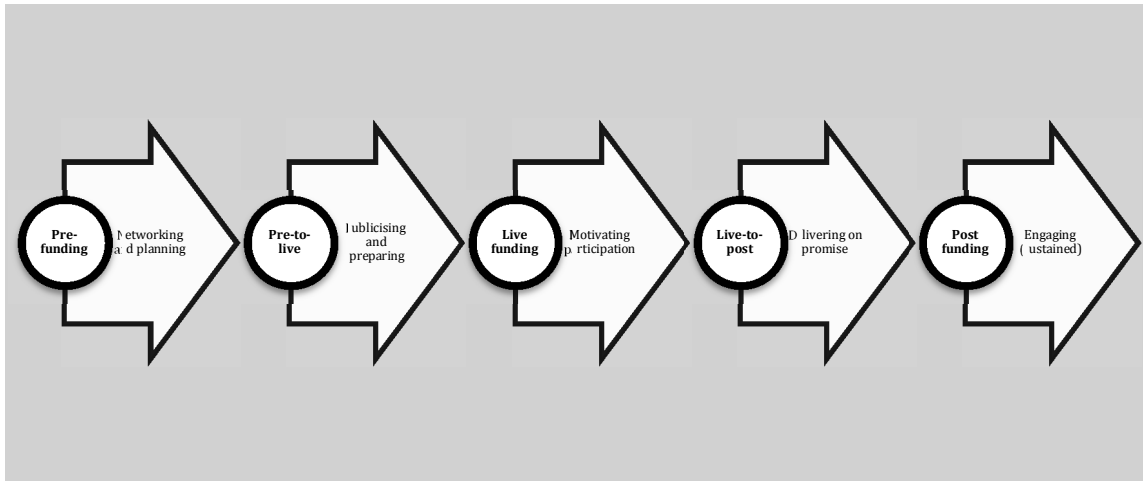


Figure 25: Key purposes per time period (3 + 2 transition) across crowdfunding

5.3 Detail per time period

Having identified periods of crowdfunding in 5.2.1, the following details all five periods in chronological order, describing purpose and specific core activities, as well as non-core activities.

5.3.1 Pre-funding: networking and planning

In addition to creator planning and strategizing, pre-funding is characterised by networking. Pre-funding activity varies greatly through having no fixed timeframe. However, all creators cited some type of project activity in advance of live project launch, and eleven of twenty-eight creators commented in particular about activities relating to long-term pre-crowdfunding. This period is defined by activity such as planning strategy, testing and refining ideas, and even assessing the suitability of crowdfunding itself:

"...we realised that we had to raise 200K pounds...we realised then that we needed to come up with a business plan that raises money in a more democratic way...[s]o we looked, and we searched all kinds of stuff, and chose to do crowdfunding."

– creator, HiSBE

This period is also characterised by networking and building connections:

"...before we even found the store, we were meeting people in Brighton, you know, people that interest us, groups that interest us, everyone from conscious business movements to Green Party, to the local council to community teams and local action teams...it was just kind of merging our own personal interests with what we were building a brand around. And we got to know people and we gave to people our time and our resources as well as building our own thing. So by the time that we came to needing and wanting money, we had supporters already there to draw on. So that was our strategy, was to get in there and get to know people and find the people who would be interested in supporting what we're doing. So the day we go on their door and ask people for money they know who we are."

– creator, HiSBE

Long-term pre-funding does not directly involve platform activity; indeed, creators cannot post to crowdfunding platforms until the project is ready to begin live funding.

Pre-funding online but off-platform activity refers primarily to the two social media channels used across crowdfunding: Facebook and Twitter. Although not all projects had social media presences at this stage, many creators, organisations, or larger affiliated initiatives set up social media accounts well in advance of live funding with the intention of building relationships (Figure 26).



Figure 26: You Should Totally Meet on Facebook

Pre-funding Facebook activity can take place on private pages or on public, group pages. In both cases this activity served the purpose of networking, although with the former the target was friends and family (i.e., primary networks already known to the creator) while the latter focused on attracting general public attention.

Although it is challenging to quantify the value of networking, there was consensus among creators that it was important to crowdfunding:

"...we had to put a lot of effort into networking, getting the message out there, and making sure that people knew how to go about supporting the project."

– creator, Stevenson Square

Figure 27 illustrates the Facebook page of Oranjezicht Farm. Although their crowdfunding live period ran from June until July 2013, from late 2012 onwards, the creators were actively populating the Facebook group page with regular site updates and photos which began building interest demonstrated by progressively more 'likes' per post.

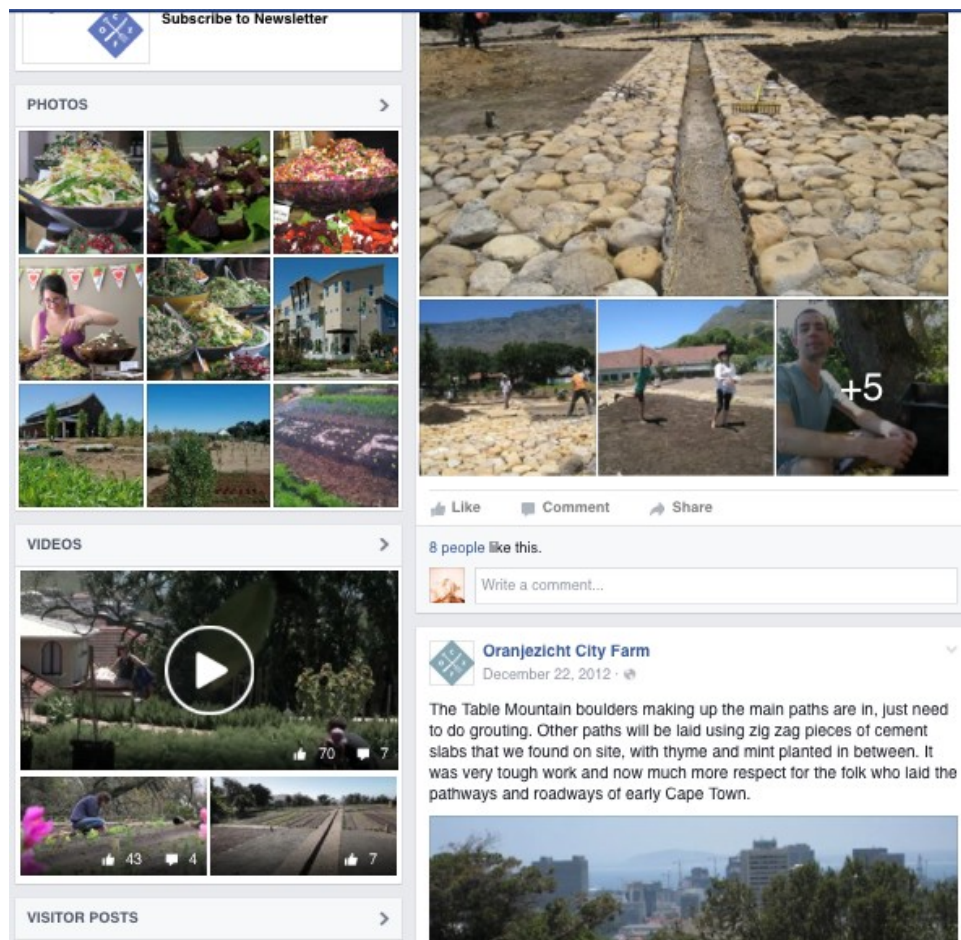


Figure 27: Facebook page of Oranjezicht City Farm

On Twitter, tweets are rarely project-specific during pre-funding, but this channel allowed like-minded individuals, groups, and initiatives to familiarise themselves, follow, and communicate with the accounts that would become central to project activity during

the live funding period. For example, while the Stevenson Square project was funded on Spacehive in 2013, its partnering organisation, Red Rose Forest, had been active on Twitter since 2010 (Figure 28):

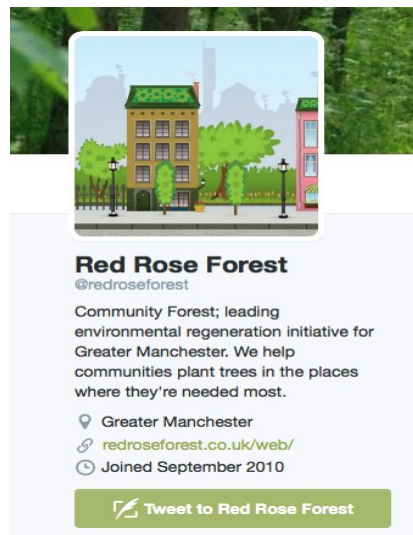


Figure 28: Organisations affiliated with projects, active on Twitter pre-funding

At this stage, content across both social media platforms relates to the general area of the crowdfunding project rather than any details of the project's launch. This builds networks and relationships, but without any specific 'call to action'.

In addition to priming friends, family and general public for the live funding through social media relationship-building, a second purpose to networking is to solicit advice and to make connections. Across interviews, this was most commonly achieved through hidden activities – personal email or private Facebook messaging (introduced in Chapter 4).

Offline activity pre-funding is inconsistent, especially as crowdfunding projects have extended periods of activity preceding the live period. However, networking is a common theme across creator interviews for the pre-funding period, connecting with those who can advise on crowdfunding in particular:

"I kind of went in to the council and said, "look, I think I want to do this project, can you help me". And I remember the woman who sat down with me said, "sure, but you shouldn't be speaking to me, you should be speaking to...that guy over there!" who happened to be sitting in the same Café as us. [He] is now my serious business mentor...[and] he kind of sent

me on a community adventure; he told me to go and teach within the community, to give a workshop and to kind of try to physicalise my area, and to speak to interesting, innovative community members who had had really successful, wonderful stories.”

– creator, Kollektiv Gallery

Non-core activity in the pre-funding period includes secondary social media use; across projects included in research this includes Vimeo for video and Pinterest to ‘pin’ project inspiration (Figure 29):

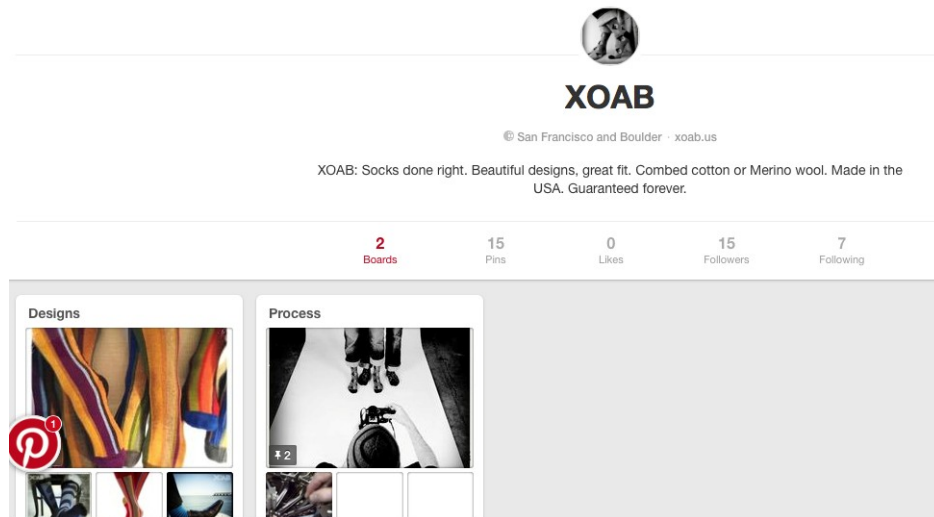


Figure 29: Pinterest used to 'pin' images and links (XOAB)

Other non-core activity includes the use of online discussion boards and fora. Use of these was not always possible or appropriate for projects, but had the potential to expedite networking as it made connections with a potentially large audience rather than one-to-one. This approach was used by the Canary in a Coal Mine project which funded a film to bring visibility to the medical condition ME/CFS. In preparation, the creator of the project began posting to a ME/CFS forum in advance of the live funding period. When the project was live, the online fora became a place to post project links and to solicit targeted support from an audience with a vested interest in the topic (Figure 30).

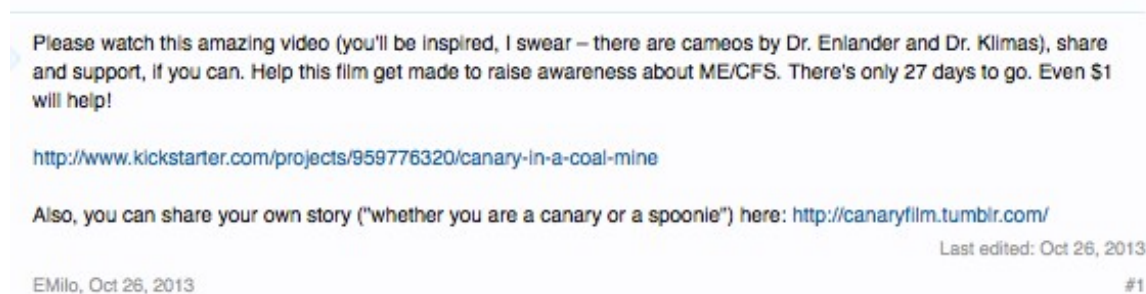


Figure 30: Online forum discussion thread for Canary in a Coal Mine project

5.3.2 Transition pre-to-live: publicising and preparing

In the pre-to-live transition, much activity relates to confirming platform and project specifics, and to establishing a promotional strategy. This transition period has a much more defined focus on the crowdfunding project itself with the aim of both publicising and preparing for live funding. In particular, activity prioritised the preparation of platform materials (summary, video, rewards if they are being included) and social media. While platforms encourage the inclusion of these details, they were also time consuming components for creators:

"the video was the most difficult, because you have to go out and shoot it, you want it to look good, and then you have to figure out what to say...[W]hereas the rest [of the platform] was like: 'oh, totally, I can write about what we're doing and be jazzed on it, and figure out reasonable tiers of rewards and all that stuff and show off artwork and everything'. So I really liked the rest of the platform."

– creator, Old College Comics

In addition to key promotional elements for projects (e.g. the project background and the informational video), the transition between pre- and live funding also focuses on promotional activities that bring momentum to live funding. These activities include large-scale coordination such as kick-off events and partnerships with media contacts:

"...it's good when you can target a communication or social something like a local newspaper that has a very good circulation because probably those are the sorts of people that are likely to have some of the money that they can support our project."

– creator, Stevenson Square

Small-scale promotion, such as word-of-mouth could also be performed during this period:

"I did a lot of telling friends about it...[the project] made me a compulsive networker. So I was telling people for a month before [it went live]."

- creator, Homicide Watch

Online and on-platform activity during the pre-to-live transition involves significant creator activity, even though the information is not 'live' or viewable by the public until funding actually begins. This period is characterised by on-platform research and the preparation of component project parts. Creators perform research by looking to other successful projects, projects hosted on the same platform, or competing projects:

"[we looked to projects] in our categories and other categories, both. I think that's part of the puzzle of crowdfunding. Anyone coming in to that, if they are serious about it, [they] are going to dig through as much history as they can and figure out what works and what doesn't. so there are things like "what should and how much should you try to raise per each customer", "how many customers are you going to need", "what is the curve as far as when do you acquire backers", "what should the campaign language be".

- creator, XOAB

"So a lot of what I did is scooting myself across Twitter and various archaeology blogs by people who I respect in my field and see how they are interacting with the public. I also looked to various websites to look at ones that, not only those that are most successful, but that also created a professional online environment."

- creator, Of Monks and Men

After choosing a platform and conducting research, creators drafted material for the project landing page. This included:

- Deciding funding goals; choosing whether the project funding model is "all or nothing" or "keep what you can get" (should the platform allow the choice); choosing, if relevant, project rewards, and;
- Creating project content, both text copy and video.

Although some details (e.g., rewards) may shift while the project is live, most creators do not change the details established during pre-funding:

"there's a limit to how much you can respond live, is the truth. And I think that it's also wise to avoid responding live more than you should, because sometimes I think that actually just waiting and sticking with you plan is probably better than changing things around all the time."

- creator, TouchKeys

At this juncture, the interaction between creator and platform support varies. In some cases, platforms took on an active role in supporting creators during the transition from pre-to-live funding and guiding them towards specific project decisions:

“the Strategist for Crowdfunding there...he did reach out to [co-creator] and I to offer us advice.”

– creator, MyHealthEd

“So they [platform] gave me a lot of guidance on how to set up the rewards, and general ideas about promotion and that kind of thing.”

– creator, Oranjezicht

Online and off-platform activity during the transition from pre-to-live funding is primarily focused on promotion. This period is characterised by social media; again, the most dominant channels used are Facebook and Twitter.

Relatedly, at this juncture, content becomes more explicitly focused on the crowdfunding project, with creators ‘pushing’ promotional content. For example, creators concentrate on authoring posts on Facebook and tweeting new information, rather than sustaining back-and-forth communication. The exception to this is the case of projects or creators that are well-known within a community; in such cases, the pre-to-live transition period can be used to clarify more questions about the project (Figure 31):



Figure 31: Questions on Facebook about the Stevenson Square project

Networking, crucial in the preceding phase, may continue during pre-to-live funding, with creators following like-minded organisations or key contacts on social media. For example Defying Dementia, raising money for Alzheimer's research, followed the three accounts on Twitter belonging to (left to right) a graduate researcher of dementia, an online tool for those with dementia, and a UK-based dementia resource (Figure 32).



Figure 32: Three contacts followed by Defying Dementia (@DefyDementiaLU) on Twitter

Many creators use a 'countdown' immediately prior to the live period to inform would-be backers about the opportunity to fund the project, and to generate excitement (Figure 33):



Figure 33: Smoothe Operator Facebook promotion during the pre-to-live transition

“Before we launched we Tweeted out, like, “we’re going to launch our Kickstarter campaign in 3 hours! Get ready!”.

– creator, Homicide Watch

Other promotional activity involves using social media to promote project-related activity occurring offline such as media interviews, as below (Figure 34):



Figure 34: Defying Dementia project promotion, posting off-line project coverage to Facebook

Offline activity in the pre-to-live transition period reinforced online promotion and networking. Often, activity during this period was characterised by informal, opportunistic networking across friends and family, as well as those who might have a vested interest in the project:

"I did a lot of telling friends about it before it launched; just in person... 'we're going to do this, get people behind it, get ready to make a big push'."

– creator, Homicide Watch

"...in the community, it [was] a rallying of the community coming together to say: 'we need to save this. This is so important to the community and we can't let this die'. So there was a rallying effort that happened."

– creator, Somerville Mobile Farmers' Market

In certain cases, the pre-funding period also required more structured, formal activity; such as coordination with media outlets. Defying Dementia coordinated an interview with BBC Radio Lancashire to build local momentum for the project in advance of live funding (Figure 34).

Creator interviews revealed it was more common for creators to initiate contact with media, however in some cases crowdfunding itself was sufficiently newsworthy that media approached creators:

"We promoted it [the project] on Twitter...and immediately one of the local TV stations called..."

– creator, Homicide Watch

Media became involved across various time periods of crowdfunding, but at this juncture helped promote the project and to attract attention at live kick-off.

Due to the work-intensive nature of crowdfunding (Hui et al., 2012), creators reported the majority of this period was devoted to activity directly preparing for, and benefitting, the live period. Secondary non-core activity was not mentioned by creators.

5.3.3 Live funding: motivating participation

Live funding is dominated by a focus on meeting funding goals. As reported by creators, this was the most intensive period of activity. This involved engaging with both pre-existing networks as well as forging new ones:

"...since our idea was founded on a sense of community, we wanted to pull on those networks ever so slightly, to not only fund our idea, but to gain interest and excitement around the idea as well"

- creator, Smoothe Operator

"[crowdfunding] did give us a chance to kind of get in peoples' faces and encourage them to give"

- creator, Oranjezicht

Although some project momentum can be initiated entirely by backers and would-be backers, the majority of live funding activity uncovered during research originated from the creators. Motivating participation was very work-intensive for project creators, requiring both time and creativity:

"It was a lot of work. Just thinking up the rewards, and you know...how to creatively thank people on Facebook without saying the same thing every time...I mean, that's not my forte."

- creator, Oranjezicht

Creators did seem to intuitively sense the importance of the live period in coordination with periods preceding and following crowdfunding:

"a campaign basically eats your whole life for the entire month it's live, plus some time before, plus - if you're successful - rather a lot of time afterwards."

- creator, TouchKeys

Although most activity is set in the preceding transition phase, the live funding period can include some in-the-moment redirects. For example, even though many creators had set social media strategies in place for live crowdfunding, some projects incorporated additional social media during the live period in response to perceived needs of backers. For instance, a Tumblr page was established by Canary in a Coal Mine to encourage backer storytelling during live funding.

Live funding is the most active time for on-line and on-platform activity. Across platforms, project launch is recognised through the live posting of project details and, most commonly, a specific "welcome" message from the creator (Figure 35):

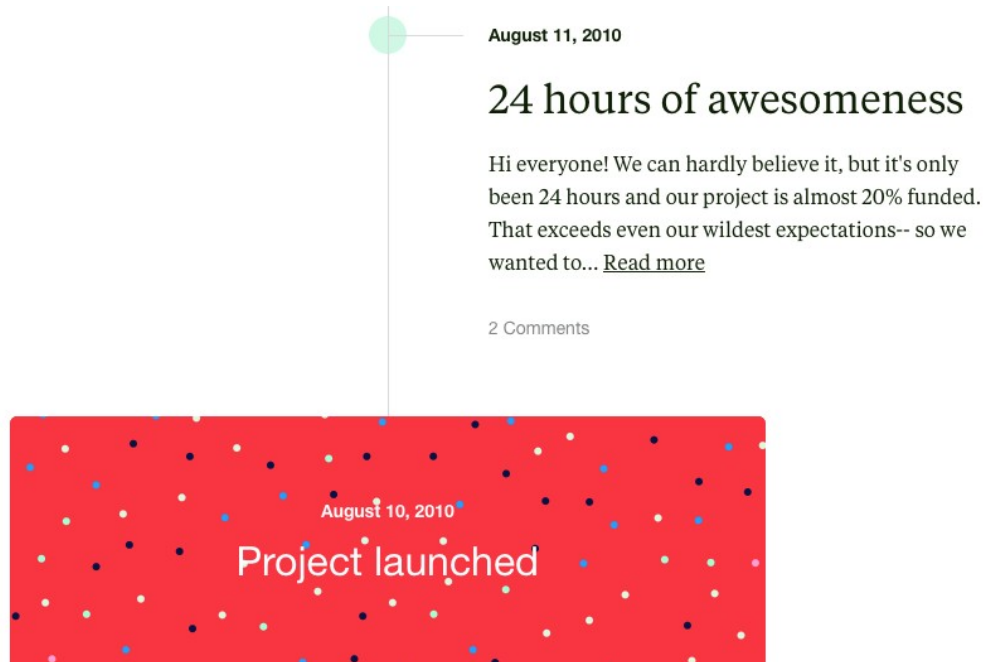


Figure 35: Project announcement of live funding and first update posted on Kickstarter

At project kick-off, materials prepared in the preceding transition period including promotional text, photos, and the project video are made live. The three primary categories of activity on the platform during live funding fit into both financial and non-financial activity:

1. Funding;
 2. Comments, and;
 3. Creator activity.
-
1. **Funding** is the ultimate aim of the live period, although the activity itself is observable only through updates to the total funding on the project landing page. Despite the importance of funding, the process itself is a simple financial transaction. The activity, the sites and the strategy that motivate backers to the point of funding are much more diverse and complex.
 2. **Comments** on the platform may originate with the creator or other crowdfunding stakeholders.

Comments during live funding vary considerably, ranging from questions about rewards and project execution to shows of support, and 'cheerleading', with positive messages. Creators tend to make public responses to questions through the platform.

In several instances, comment threads led to creators redirecting some project choices in response to public consensus. Across interviews with project creators this was particularly true for those with projects funding physical product, illustrated in detail here:

“when I launched I said basically: here’s what it does, here are the capabilities to the hardware, it’s a sensor kit, it attaches by USB, I support Mac and Linux on the software, it works with all different Midi programs, etc. [...] And [people said]we need Windows support ...Now the Windows thing after a while I got enough requests that I decided: you know what, I had been building the software in the JUCE environment, and this is a multi-platform sort of cross-platform development kit. So it should, in principle, be easy to build it on Windows as well as Mac and Linux. So after a while I thought I’ve already gone halfway there, if I’m ever going to do Windows support, I might as well promise it now. So I said I’d add Windows support.”

– creator, TouchKeys

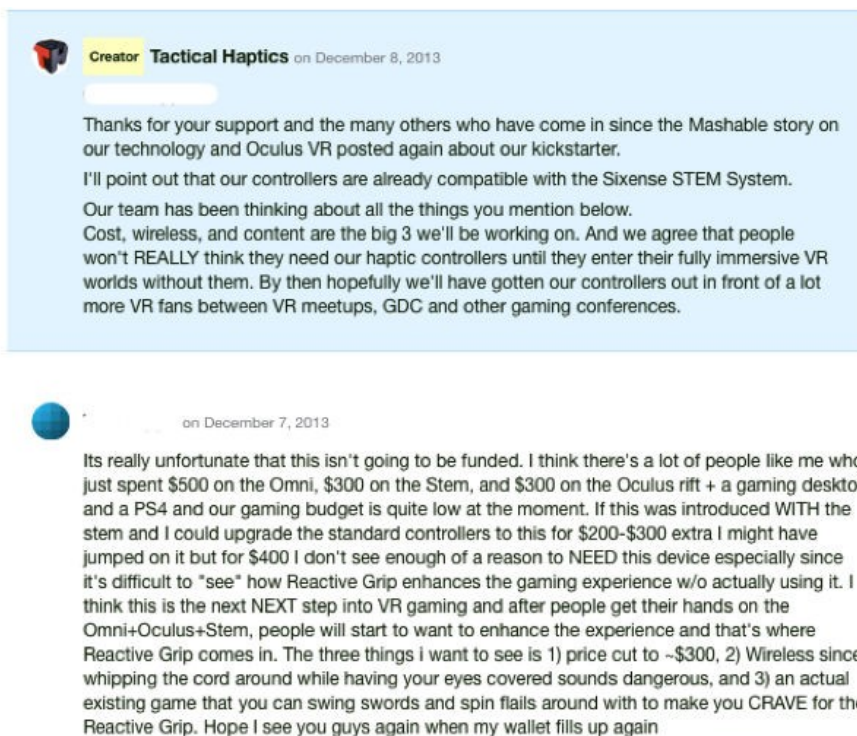


Figure 36: Reactive Grip Kickstarter comments between backer and funder

Although comments may be posted after the close of live funding, this research suggests that this rarely happens.

Occasionally, activity is initiated to push a project that is close to its funding goal. Although creators often take responsibility, backers with particular connections to projects can also move this forward. In the case below (Figure 37), during the final hours of live funding, a backer led a charge in the project's Kickstarter comments encouraging everyone to increase their pledge amounts. The comments section was seen both as a discussion forum and a space to mobilise others motivated to see the project succeed.

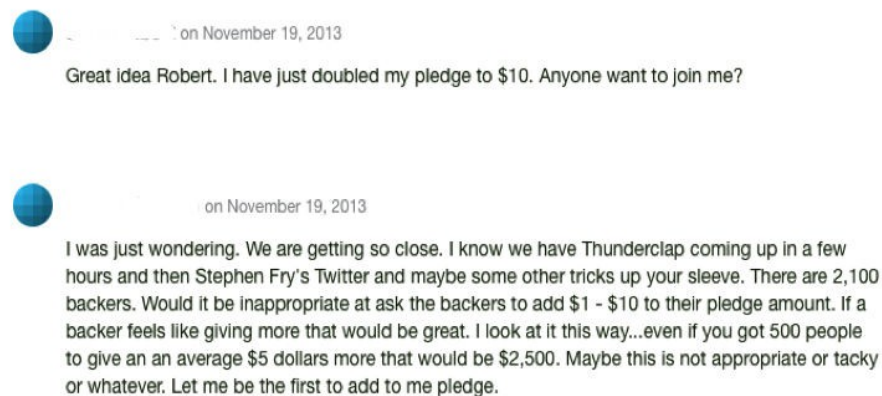


Figure 37: Backer-initiated strategy to increase funds raised

3. **Creator activity** in the form of updates is the primary channel by which the creator communicates with backers and would-be backers from the general public. Updates often focus on funding, for example, posting when there is limited amount of time remaining to fund, or if the project has reached a certain percentage of its total funding ask. Creators regarded these updates as a method of keeping backers informed and sustaining momentum:

"...[success is] a lot of finger-crossing and a lot of updates. Also the updates were really good, because things get really hot, and then they cool down, and then you want it to get hot again. So you need to keep updating your backers"

– creator, Food to Farm Desert

Generally, backers may comment on updates, or 'like' them. However, creator updates are rarely used to begin new conversations, but rather for the transmission of information from creators to the public.

The sole exception observed during this research was where creators used updates for product feedback. In this case, Fingersurfing polled their network during the live funding on the best colour of wax for the surfboards and, ultimately, went with the consensus vote:

"We were just sitting there like "how the hell should we decide the flavour of the wax we should have, or what colour" so, why not just ask the people. And that was our most popular comment I think. People feel very strongly about their wax!"

– creator, Fingersurfing



Figure 38: Fingersurfing creator updates

The live funding period represents various ‘types’ of online activity extending beyond the platform. The most important is the use of social media in terms of what it can help facilitate, such as involvement and collaboration (Moissejev, 2013). As such, online and off-platform activity during live funding is an important component to crowdfunding success.

During the live funding period, social media activity peaks for sharing of content. As in previous sections, the two dominant social media channels used across crowdfunding are Facebook and Twitter. Both sites focused on promoting the project, engaging backers with calls to action, fostering conversation, and encouraging backer-initiated content and feedback.

"I would wake up, and I don't remember where we got this statistic but it shows that most people check FB early in the morning and then at lunch. So we made a point to put any updates in the morning."

– creator, MyHealthEd

During this live period Facebook and Twitter both featured similar activities, as introduced in the preceding chapter (Chapter 4.2.5).

In parallel with publicly ‘pushing’ project information across social media, creator work during the live period features a significant amount of hidden work.

Media activity is also prevalent at this stage of crowdfunding. Across creator interviews there was no consensus on this process; in some cases media outlets contacted creators, and in other cases media contacts had to be identified and engaged with through creators or platforms. While some of this media was offline (e.g., print news), the majority was in the form of online articles or sites hosting online versions of offline components (e.g., radio show which also linked audio online). This served a similar informational and promotional purpose to the media activity described in the preceding section.

The majority of studied projects engaged with offline activity during live funding. However, the link between offline activity and successful funding is neither a guaranteed nor an obvious one:

“I did run around my neighbourhood and put flyers in peoples’ mailboxes. I think that was unsuccessful.”

– creator, Seahorses

“...we decided to make these business card things and to hand them out to people on the street. And we put the QR code on them that went to my project. And there was a local Waterfight Parade that we actually laminated some of the cards and handed them out to people on floats...I actually think that I got at least one donation from that.”

– creator, Climate for Castrators

For example, Oranjezicht held open volunteer days at the site of the project during live funding. On-site the project was being promoted and a laptop was made available for on-the-spot donations:

“We did have a sign, and people, like someone would sit there with their laptop so people could give online. And, pretty much, no one did.”

– creator, Oranjezicht

Since funding is processed online this is a period where online participation and on-platform activity are crucial to success. It is possible that offline activity is better suited for other periods along the crowdfunding timeline. The exception to this pattern was the case of offline media, which helped extend the reach and audience for crowdfunding projects. Print newspaper and television were two ways in which projects received attention during live funding:

"Citizinvestor got an article written about the campaign in the Metro paper which, you know, in the US is the one that is in all of the metro stations in Boston and New York and so on...and I think that was towards the middle of the campaign."

- creator, Tech Goes Home

"the TV news were here twice. Within a month. And we had articles written about us in newspapers."

- creator, Food to Farm Desert

Non-core activity during the live funding period are those activities less likely to have significant influence on a project. For example, no creator traced a correlation between blog posts or website updates and crowdfunding activity. 'Secondary' social media – those channels that were not primary sites for sharing information or communicating – were also non-core during live funding.

Surprisingly, even for successfully funded projects with thousands of backers such as Canary in a Coal Mine, YouTube (Figure 39) did not inspire any key activity such as shares, embedded video in other locations online, or even discussions:

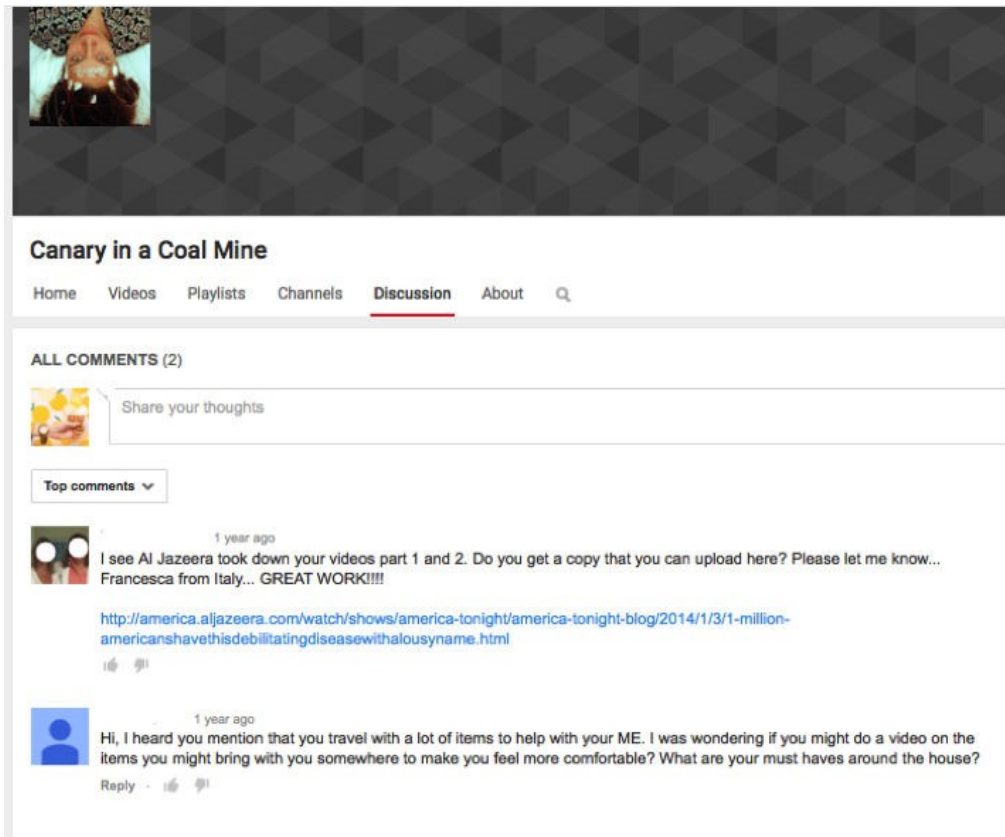


Figure 39: Canary in a Coal Mine YouTube channel³⁷

5.3.4 Transition live-to-post: delivering on promises

In the transitional period from live funding to post funding, the focus of successfully funded projects is on:

1. Delivering on the promises made during live funding (be those physical or intangible outputs); and
2. Reinforcing the use of sites of activity beyond the platform, transitioning activity to these sites after the platform focus of the live period

As a result, this period's activity prioritises creator action in delivering stated rewards and project development, as well as heightening communication across various sites of activity in order to transition from the platform and counteract any 'drop off' of interest.

³⁷ Although YouTube enables comments, it was uncommon for this to be used as a site for project discussion at any period along the crowdfunding timeline (https://www.youtube.com/channel/UC6qt7dyl4F_MXMpHHPJtlw/discussion).

It is important to note that this, and the following post-funding phase, depend upon whether the crowdfunding project was successfully funded or not. If not funded, no further action is required of the project creator.

Although the purpose of this period is to conclude the live funding and begin circulating rewards and/or progressing with the development of the project itself, creators were consistent in expressing the challenge of doing so within a tight time period.

Online and on-platform activity is considerably slowed beyond live funding. However, even if activity during this period is not as frequent as before, the platform remains central for transmitting basic project information, and helps with continuity and transition.

Certain platforms have features that promote their use for on-going updates. Kickstarter enables creators to send these updates to all backers via their email addresses shared at the time of donation. Many projects use the platform to circulate a message to backers at the end of the live period. These updates tend to incorporate a message of thanks, a proposal for next steps, and suggestions for how backers can continue to contribute.

In this transitional period, the platform can also direct interested parties towards action on other sites. For example, once successfully funded, Fingersurfing creators used Kickstarter to link to their website and other social media channels (Figure 40). This encourages backers and others who might come across the project page after the end of funding to engage with the project in new ways, and also to consider additional product orders:

Fingersurfing is fully funded and in the air!

Now when the time runs out, order your fingersurfboard at

www.fingersurfers.com

Also follow the progres on our "**Fingersurfers**" facebook + instagram and twitter.

Ride On Backers!

Figure 40: Fingersurfing post-funding notice on Kickstarter

This is helpful as a creators are approaching the key challenge of delivery. Circulating updates and encouraging transparency between backer and creator helps maintain positive relationships between stakeholders:

“...honestly, we were pretty late in getting some rewards to folks...”

– creator, Beez Kneez

Social media activity declines after the live-funding period, but remains an important online but off-platform feature. Generally, social media channels are used to announce the official close of live funding, and to post, if successfully funded, a celebratory comment, video or link. Importantly, this celebration tends to be framed in collaborative, group terms (“we did it”, as in Figure 41), creating a sense of ownership and shared accomplishment for all stakeholders:



Figure 41: Facebook image celebrating the successful conclusion of the live funding for Canary in a Coal Mine

Online the transition from live to post funding is also an opportunity to remind backers and the public at large of how to remain in contact with creators. For example, the creator of Canary in a Coal Mine, posted to the Facebook page to remind the public about the project hashtag to be used across all social media postings for continued communications.

Backers’ activity online after successful funding was celebratory. This involved showing support in the form of a ‘like’ of a positive status update about the project’s funding or a more personal contribution, such as in Figure 42 where backers added their own content and uploaded personal pictures in shared celebration of a project successfully funded.



Figure 42: Canary in a Coal Mine backers celebrate post-live funding on the project Facebook page³⁸

Offline the transition from live to post funding features a significant amount of hidden work for creators. The pressure to deliver rewards within the stated timeframe is a common challenge during this period. This was often made harder by time and other logistics:

"...making and packaging and sending things for people is not really part of my daily life normally, so that was harder to find the time to do."

– creator, Climate for Castrators

³⁸ In the case of Canary in a Coal Mine, the Facebook page was rapidly being updated as the project was reaching the end of live funding on Kickstarter (<https://www.facebook.com/canaryfilm?fref=ts>).

These challenges reflect that many projects are initiated by first-time entrepreneurs who did not even necessarily plan ahead beyond a successful funding period:

"I've just been too busy shipping the instruments [final product]...I think in the heat of a campaign it's very easy to get pulled away from what your core stuff is and make a lot of promises because you feel like if you don't make promises then you're not going to fund, and then what happens is that you've over-promised and then you've kind of...either never have any free time, or end up having to under-deliver and let people down."

– creator, TouchKeys

Delivering, and delivering well, was an important theme for creators. The idea that a relationship between creator and backer could be forged through the exchange of funds and support for their project was reinforced in creator interviews. A sense of 'obligation' to backers was a common sentiment to all creators:

"there is a period afterwards when you have a huge...obligation to all the people who helped you succeed. And then that's something that we really felt. Like first we were like "holy shit we got 21 grand, holy fuck, let's buy a Porsche!". And then it was like: yeah, we can do this! And then it was like...this is actually 1,000 people who trusted their money with us and it was just, like...ok, well then now we have to make the coolest product ever for these guys, they really deserve it because we're so grateful. And it takes a lot of time."

– creator, Fingersurfing

For projects with physical sites, this transition period is a time when backers are especially interested in site visits. In terms of this time period being focused on delivering on project promises, these visits could be part of the backer 'reward', but also served to transition backers from the live funding towards a deeper sense of connection; delivering on a sustained relationship.

"...we had crowdfunders' day – a potato day – and the crowd came from all over the place"

– creator, Sarvari

Non-core activity during the live to post transition refers to activity that is neither directly responsible for delivering on the rewards of the project, nor communicating updates to backers. These include various ways of marking the end of the live funding period and beginning of the post-funding. The Canary in a Coal Mine project held a "wrap party" on Google+ to celebrate the project. This provided an opportunity to congregate

and also to reflect, using the prompts provided by creators . This wrap party was promoted across various social media channels used by the project Twitter, Facebook, Google+ (Figure 43). Although this was well-planned and provided a means for the international group of backers to congregate together, it was poorly attended. Of the 2,593 backers of the project, only 25 attended³⁹:

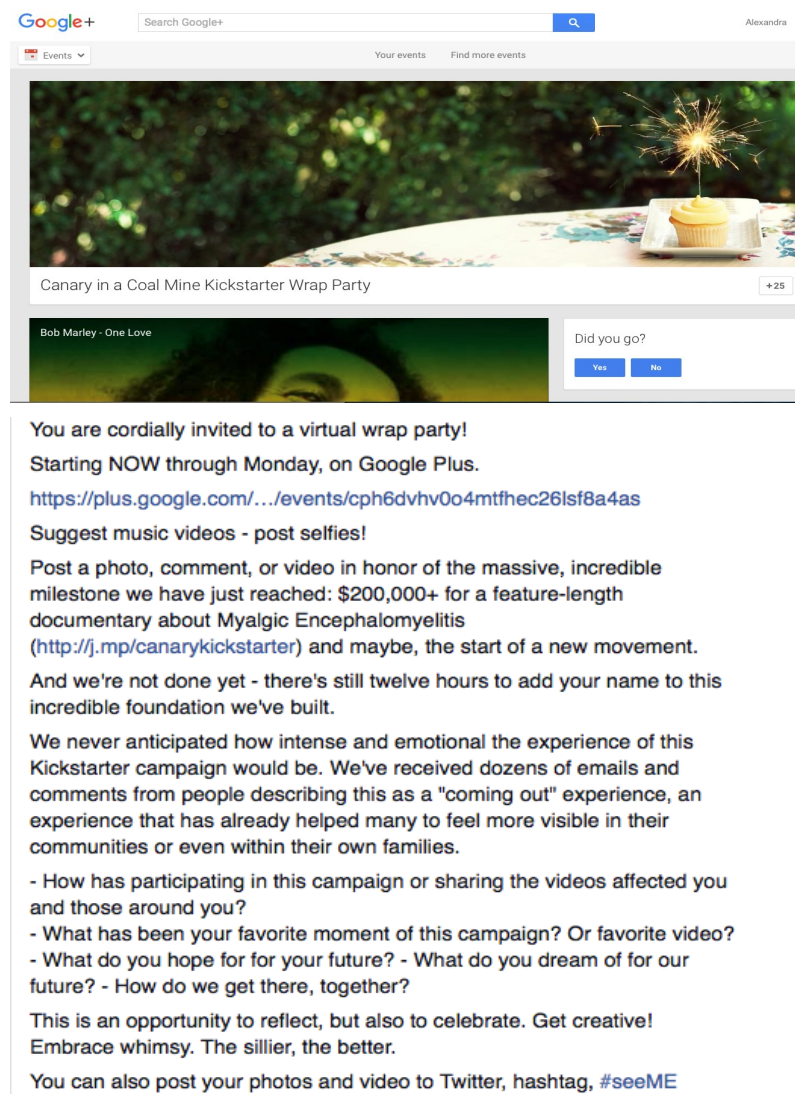


Figure 43: Google+ wrap party for Canary in a Coal Mine

³⁹ No reason was given for poor attendance, although limited advance notice, lack of familiarity with Google+ and coordination across time zones could all be contributing factors (<https://plus.google.com/events/cph6dvhv0o4mtfhec26lsf8a4as>)

5.3.5 Post-funding: engaging

The post-funding period is much less structured in terms of timing and types of activity. Creators included in the research ranged from those who had just completed funding to those who had funded several years prior. Post-funding can also serve different purposes depending on the type of project. Whereas some projects might just be interested in securing funding through the live period and have limited involvement beyond delivery on promised rewards, other projects seek both funding and a sustained, engaged audience. This latter scenario was true for on-going initiatives (e.g., Canary in a Coal Mine) and those with longer-term multi-stage goals (e.g., Adopt A Bee).

The common intent for post-funding across creators interviewed is to continue engaging with their backers through the implementation of the final output, or by starting new initiatives employing the same base of backer support. This idea of post-funding relationships is consistent with the longer-term dynamics that can exist between creator and backers, as described by Gerber and Hui (2013).

Several creators explicitly expressed a sense of accountability to their backers during this period, recognising their contribution to moving the project forward. This echoes the discussion of crowdfunding and community relationships explored later in this and the following chapters:

"I won't ask those people for money, like, for a cent, before I fulfil the promise that we have made, just to make this bond between us and them even stronger."

– creator, Adopt a Bee

"...a least personally for me, there's an accountability thing. Where, like, you're asking for money towards the beginning of your project...[and] you don't want to ask for money again until you've produced a "product", and to show people "this is what you've helped me do, this is how your money was spent, this is, you know, what you've created."

– creator, Surviving the Savanna

Online and on-platform activity post-funding is minimal. Although crowdfunding platforms tend to archive public postings after the end of live funding, crowdfunding activity in the post-funding period tends to transition away from the platform itself.

However, certain recently added features to Kickstarter ('Spotlight') and Indiegogo ('InDemand') aim to retain platform audiences beyond the close of the funding period⁴⁰.

Kickstarter's 'Spotlight' (Figure 44), established in March 2015, maintains that "funding is just the beginning"⁴¹, and provides options for creators to share an expanded story of their crowdfunding projects and updates long after the live funding. Through Spotlight, project pages on crowdfunding platforms become primary homepages:

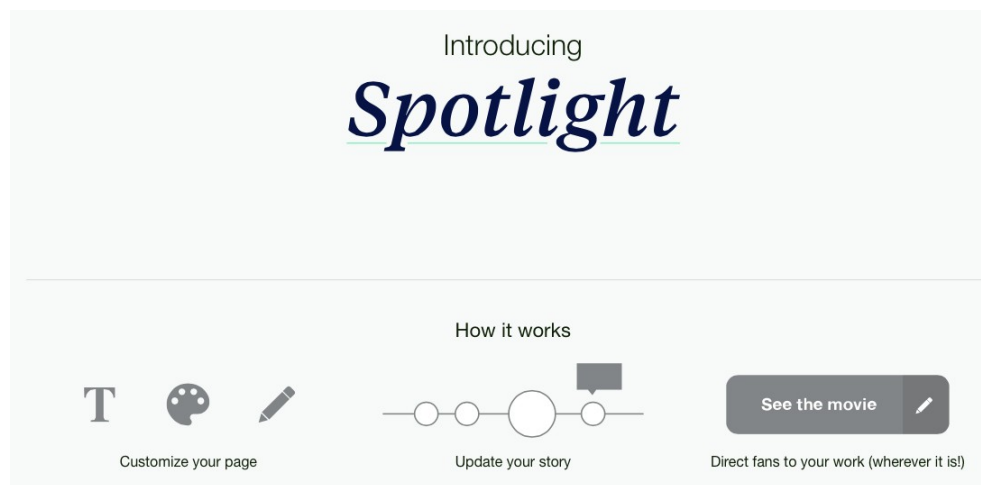


Figure 44: Kickstarter's introduction to Spotlight

Indiegogo's 'InDemand' feature, established in January 2015, allows creators with successfully funded projects to transition directly to the post-funding time period while still using the platform for backer communications, pre-orders and other project logistics. Although InDemand has purpose beyond funding, the example of Geek Pulse DAC (Figure 45) also illustrates the great financial momentum that crowdfunding can generate; the project has raised more than 3 million USD, with 1.4 million of that total coming post-live funding through InDemand:

⁴⁰ Both of these features launched on their respective sites in 2015. As a result, though notable in terms of confirming that platforms are identifying important roles beyond live funding, these features had no direct impact on the projects included in research.

⁴¹ Kickstarter shares details of Spotlight for creators, backers, and interested members of the public at (<https://www.kickstarter.com/spotlight>)

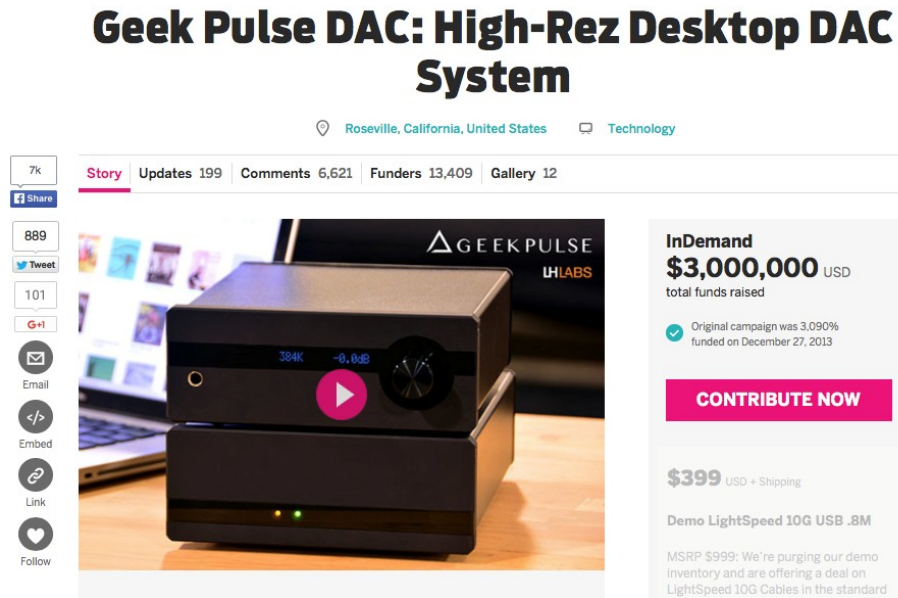


Figure 45: Geek Pulse DAC using Indiegogo's InDemand⁴²

These features suggest that platforms themselves recognise live funding period is only a small portion of crowdfunding's activity and potential.

Backer-motivated activity on the platform post-funding occurs most commonly in the case of projects with rewards and pertains to delivery enquiries. That these comments are public may, arguably, serve as an additional accountability feature to ensure that creators deliver on their live funding promises:

⁴² Although the results from Geek Pulse DAC might not be typical, they do illustrate the potential of various stages of activity across projects: (<https://www.indiegogo.com/projects/geek-pulse-dac-high-rez-desktop-dac-system>).

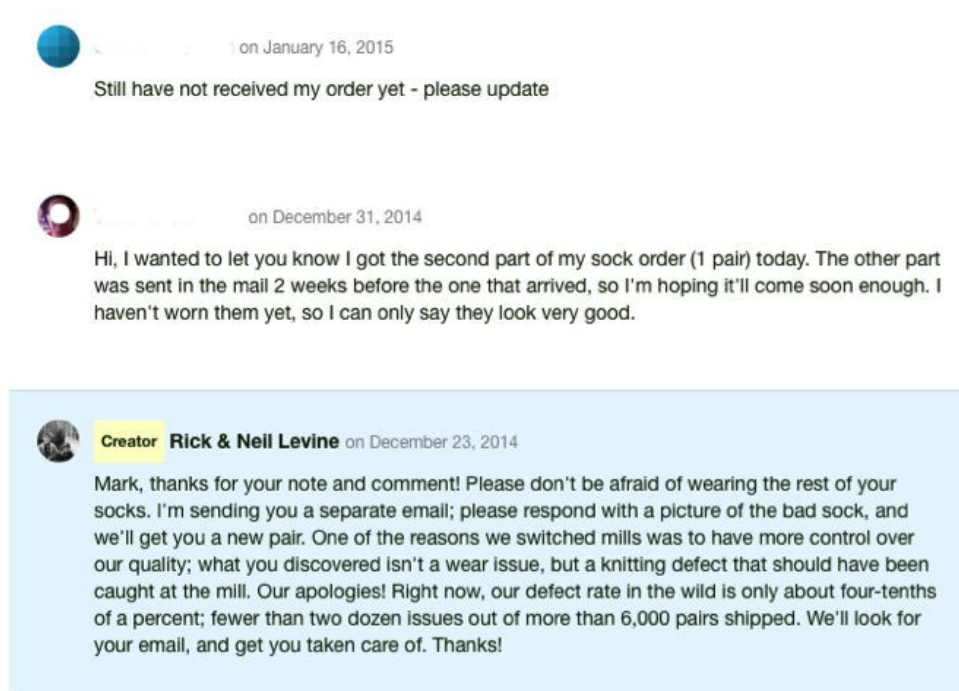


Figure 46: Post-funding comments between creator and backers regarding feedback and delivery status (XOAB)



Figure 47: Project backers prompting creators for project updates

Creator-motivated activity on the platform post-funding tends to be in the form of updates. The platform provides an efficient way to send immediate updates to all backers. These updates are especially useful for projects with an on-going mission or larger initiative at hand; in this case, the creator uses the platform to communicate with backers from the live period of funding, seeing them as a potential target audience. Months after the close of the funding, these updates might only be tangentially related to the funding period for which the platform was primarily used.

This feature of platforms particularly serves projects with longer timescales, such as film projects, enabling backers to ‘see’ progress through sharing production details, stills, and press coverage. In Figure 48, the project creator continues to engage backers with an update (#37) on her continued work, but also encourages the backer group to participate through a targeted call to action:

KICKSTARTER

#37

Jen Brea on NPR Monday
morning 10am ET/7am PT

Posted by Jennifer Brea

Hi everyone! I will be appearing Monday morning live at 10am ET/7am PT on the national NPR show, On Point along with Dr. Ellen Wright Clayton, chair of the IOM committee, Dr. Derek Enlander of Mt. Sinai and Dr. Daniel Neides of the Cleveland Clinic.

The show will discuss Myalgic Encephalomyelitis, Chronic Fatigue Syndrome and the new name and definition for Systemic Intolerance Disease (SEID). I will also talk a bit about the film.

It is a one hour, live call in show, so you can call in with your questions or comments during the broadcast.

Figure 48: Post-funding project updates circulated to backers (Canary in a Coal Mine)

Online and off-platform post-funding, creators seemed to inherently understand the value of an audience built over the course of crowdfunding, which will be discussed in terms of ‘community’ in Chapter 6. This crowd has the potential for long-term influence and activity, with one project creator describing backers as “activists” rather than simply financial donors:

“...I don’t think of them [backers] as donors, because I think maybe donors pay us money to do the job for them, they are sort of offsetting themselves. Like, I want to be eco-friendly, so I will give some money to Greenpeace and that makes me green. But in crowdfunding it doesn’t work like this. They don’t pay us to do our job. They are actually taking an action to do something, and they are part of the project. And so they are much closer to activists than campaign donors. That’s how I see it.”

– creator, Adopt A Bee

As a result, creators emphasized taking actions to maintain this crowd. In some cases (e.g., Adopt A Bee, Kollektiv Gallery, Sarvari, Saving the Savanna) this was discussed in

terms of continuing engagement with the crowd in order to then continue crowd contribution in the future, even possibly for subsequent crowdfunding projects. In other cases, providing an on-going space for backers to congregate was specific to the project, such as in this instance providing backers a place to discuss their shared use of the prototype:

“maintaining the community is important [post-funding]. I started a Google group, honestly just a public group where people can share ideas and get some feedback”

- creator, TouchKeys

The most typical approach to maintain engagement post-funding was for creators to continue use of the primary social media channels employed during live funding (Facebook, Twitter). With the exception of TouchKeys (Google Groups), no new project-related social media channels were established by project creators post-funding.

The social media channels that carry over from live funding include project updates in the post-funding period, most notably major milestones related to project execution. However, these feeds generally revert to more general content; related to the general topic of the project, and not the crowdfunding specifically. Any social media channels that stay active can be project-specific (see: @smoothe_op), larger organisation specific (see: @redroseforest), or in the name of the creator (see: @pipwillcox)⁴³. Conversely, a lack of activity by some projects post-live funding sent opposite cues and signals to members of the public in terms of on-going activity and engagement, such as in the case the unsuccessfully funded You Should Totally Meet, where the project Twitter account that was not updated since the project was live in December 2013 (Figure 49):

⁴³ These examples are all from Twitter. Further details provided in Appendix 1.



Figure 49: You Should Totally Meet project Twitter

This period is characterised by significant inactivity. While live funding requires significant time and coordination, once that period concluded, certain activities fell to the wayside.

“The blog is still live, but at this stage I haven't updated it for ages.”

– creator, Sprint for Shakespeare

In addition to platform updates emailed to backers (see: previous section), creators also make use of email lists to remain connected to backers. In the following case, the creator cites positive engagement rates in the post-funding period, as evaluated through email open rates:

“...those people that we ask and that donated money...they are still in touch with us. We sent them an email 2 weeks ago and it got over 50% open rate: so, they are engaged, still....I have a reason, it's an educated guess I would say, that I think those people would stay with us, for a longer [time], [and] for other campaigns also. Because the bond that is created when you give money to something or somebody is really strong.”

– creator, Adopt A Bee

Offline activity in the post-funding period was most obvious for projects with physical sites. In this case, the post-funding period was a time during which offline activity was coordinated, such as groups of volunteers (see: civic crowdfunding example, Chapter 6.2.6). Through offline activity the creators were able to benefit from some of the non-financial advantages of crowdfunding, with volunteers helping with site maintenance

and upkeep. However, the challenge of on-going engagement for both creators and backers was also acknowledged:

“trying to find really solid people and keep them engaged? That’s very hard to do. And I don’t have a good answer for that [how to do it], we’re still trying to work through that...I’ve been a volunteer coordinator for other NGOs where I’ve worked...sometimes you get skilled committed volunteers who will show up in the rain on a Saturday but most of the time, you don’t...and this is completely volunteer-run so it’s hard because the people who are really in it, really have to stay in it. And I think you really risk burn-out, which nobody wants.”

– creator, Oranjezicht

During post-funding, momentum from the live period can be harnessed towards more activity. In one case it related to financing, with a successfully funded project serving as validation of market support:

“[I]t [crowdfunding] helped us raise more money off the back of it, because people – like the bank – would look at it and go “wow, you raised 30K pounds through collaborative funding? Wow. Well, this must be an idea people like”. But aside from that: it just got us involved with people, which we love to do, and which the plan is all about...people.”

– creator, HiSBE

This momentum resulted in creators and backers launching new initiatives related to the project, such as shared discussion of use of the final product (e.g., Fingersurfing), continued shared research in the area (e.g., Sarvari), and developed programs and continued outreach (e.g., Sprint for Shakespeare).

Due to the variability of activity at this stage, research was not able to identify significant non-core project activity during post-funding.

5.3.6 Summary of activity per time period

Across the three core time periods of crowdfunding, as well as the two periods of transition, the following common themes have been identified:

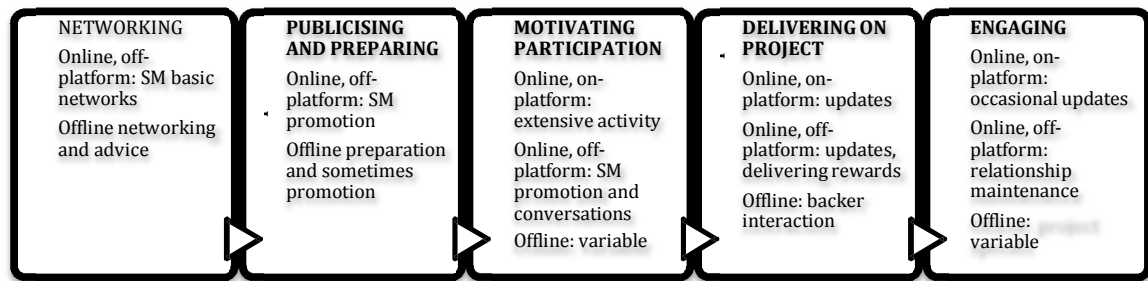


Figure 50: Crowdfunding Activity Process

Although the activity per time period is not fixed, the distinct purpose of each suggests that crowdfunding is a process whereby certain purposes are addressed through set activities: online and on-platform, online and off-platform, and offline. This section summarises notable creator and backer activities, as well as non-core activities where applicable.

Consolidating information in the chart reveals the extent to which activities in crowdfunding are complementary, rather than mirror images of one another, reinforcing industry wisdom:



Figure 51: Excerpt from crowdfunding discussion on Twitter⁴⁴

This section illustrates that the same aim per period can be accomplished through different activities and various sites.

5.4 Summary

Figure 52 builds on Figure 23 through adding insights to the visualisation of Chapter flow.

⁴⁴ Unaffiliated with any project, Twitter discussions about crowdfunding can be identified through hashtags such as #crowdfunding

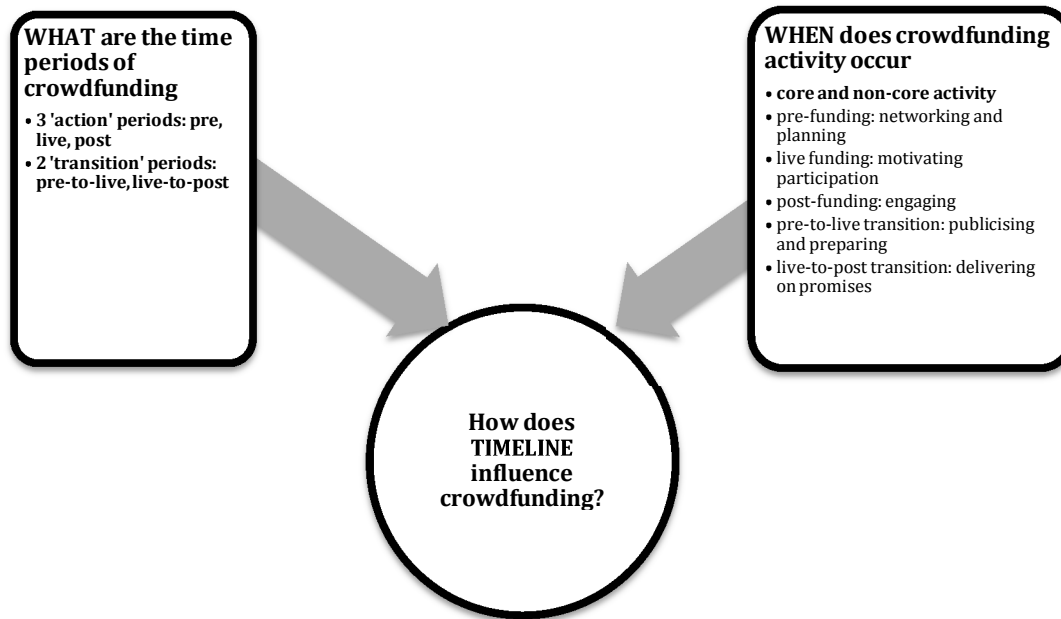


Figure 52: How timeline influences crowdfunding: the flow of insights

Acknowledging the role of timeline in crowdfunding can help anticipate activity as well as stakeholder needs, in particular creators planning for projects. This Chapter first identifies distinct 'action' ($n = 3$) and 'transition' ($n = 2$) periods, then identifies purpose per crowdfunding period. Finally, the chapter maps crowdfunding activity along the timeline created by these five periods.

Consideration for crowdfunding's timeline contributes to three insights:

1. **The same sites of activity can have different purposes** across crowdfunding periods;
 2. **Crowdfunding activity is concentrated differently across the timeline of a project**, and;
 3. **Crowdfunding activity does not occur in isolation across time.**
-
1. **The same sites of activity can have different purposes** across crowdfunding periods. Facebook activity, the most prominent type of social media activity in crowdfunding, is a good example of different purposes served by same sites of activity across crowdfunding. During the pre-funding period Facebook activity is engaged for networking, during live funding it highlights key Kickstarter content, and during post-funding, Facebook provides a site for continued engagement. The timing

of the use of Facebook clarifies the purpose of its activity, and emphasises how diverse goals can be met using the same social media channel. Explicitly cataloguing the multiple uses for Facebook, as performed throughout this chapter, could help future crowdfunding creators anticipate the sites of activity central to their projects. This chapter includes detail on various other sites whose purposes changes across crowdfunding timelines, for example: crowdfunding platforms, other social media such as Twitter, and offline sites of activity.

2. **Crowdfunding activity is concentrated differently across the timeline of a project** Despite the existence of three key time periods and two transition periods, the most universally shared activities across crowdfunding take place during the pre-to-live transition, the live period and the live-to-post transition.

Longer-term pre and post-funding periods are the most variable and, in this case, most susceptible to changes based on specific characteristics of the projects. For example, at these junctures, details such as whether the project is from within a pre-existing organisation with networks, or is an entirely new initiative, significantly influences activity. The specifics of characteristics of importance, as well as sub-types of crowdfunding projects, will be discussed in both Chapter 6 and Chapter 7. The acknowledgment that, although five periods of crowdfunding exist, not all require the same amount of creator work or activity helps those preparing for projects anticipate crowdfunding needs.

3. **Crowdfunding activity does not occur in isolation across time.** Crowdfunding activities do not exist in a vacuum; activities coordinate with one another across time. Crowdfunding periods are distinguished by different priorities and the groups of activities used to achieve specific aims. A point for future research includes deeper investigation into whether certain activities 'trigger' other activities (e.g., Facebook posts might particularly influence rate of Tweets). Crowdfunding activities work in tandem with one another. For instance, activities can have compounded effects (e.g., Facebook and Twitter activity both serving to motivate participation during live funding) or complementary effects (e.g., on-platform activity motivates financial

donation, whereas offline activity encourages on-site volunteering) across the crowdfunding process.

Identifying crowdfunding periods and their specific purposes emphasises the importance of the activity presented in Chapter 4. Through this approach this chapter reinforces how timeline influences crowdfunding through choice and purpose of activity.

Chapter 6: Crowdfunding and Community

6.1 Introduction

Themes of sociability across crowdfunding have been incorporated throughout this thesis, from discussion of user-generated content and collaboration (Chapter 1), to explicit mention of networks within crowdfunding (Chapter 2), to social activities such as offline organising and engagement through social media (Chapter 4). These themes are consolidated within this chapter by considering community within crowdfunding. This chapter addresses:

How does community influence crowdfunding, and vice versa?

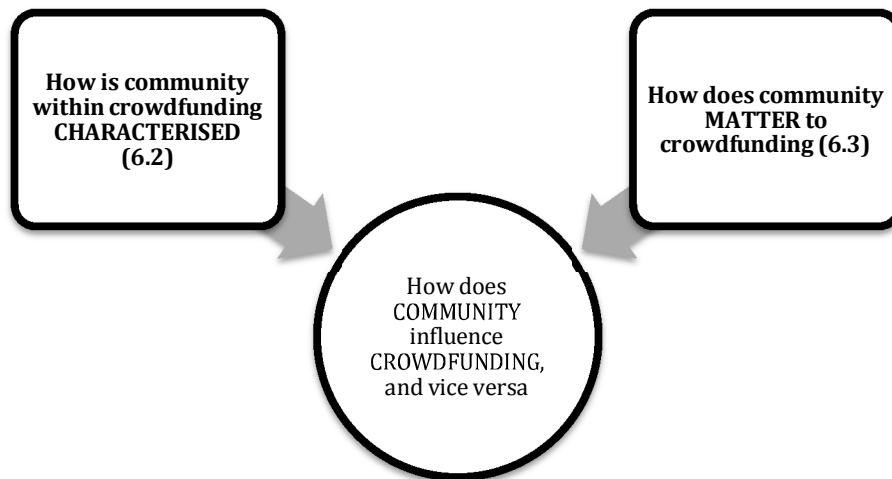


Figure 53: Chapter 6 flow

Section 6.2 characterises community within crowdfunding through discussing component parts, presenting a definition of community within crowdfunding, and applying a theoretical lens to clarify bonds of attachment within online community (Ren et al., 2007). Section 6.3 then proceeds by proposing a positive bi-directional relationship between community and crowdfunding, suggesting that community benefits crowdfunding, but also that crowdfunding could benefit community. Table 10 (Chapter 3.6.2) outlines the research methods used to generate insights and address the questions as presented in Figure 53.

It is important to acknowledge that community *can* have negative illustrations; it is conceivable that communities engage in behaviour that harms, rather than enhances, a project. Public media stories confirm the extent to which crowdfunding could help develop the 'wrong' communities, such as foreign terrorist groups (Rubinfeld, 2015). However, within this research crowdfunding was perceived by project creators to be overwhelmingly positive. Evaluating the ethics or validity of different communities is beyond the scope of this thesis; rather, the focus of this chapter is placed on acknowledging the existence of community within crowdfunding, identifying its component parts, and illustrating ways in which it might be fostered for project success.

6.2 Characterising community within crowdfunding

Although there was explicit, and extensive, mention of community by creators across semi-structured interviews, there is no current definition of community as it relates to crowdfunding.

The following steps outline the process by which community within crowdfunding was assessed:

First, examples of community as described by creators across this research are listed and discussed. Through this, component parts of community within crowdfunding are identified (6.2.1).

Second, the concept of community within crowdfunding is shaped by review of existing community literature. To examine and to validate this emergent perspective, this chapter draws from other understandings of community, particularly online community, due to its suitable application to crowdfunding (6.2.2).

Third, the definition of community within crowdfunding is unpacked, considering the influence of empirical data as well as existing community literature (6.2.3).

Fourth, the specific lens of Ren et al. (2007) regarding attachments within online community is applied to crowdfunding to further understand two components of

community: emotional and behavioural investment (Sections 6.2.4, 6.2.5). A discussion of this lens assesses the suitability and limitations of its application to crowdfunding.

Finally, the example of civic crowdfunding (6.2.6) provides a focused illustration of the ways in which community can affect crowdfunding, and vice versa. Through highlighting offline activity in civic projects this example reinforces that community within crowdfunding is not limited to online.

6.2.1 Community across empirical work

Semi-structured interviews with project creators confirm that a significant portion of crowdfunding is social; activity from, and engagement with, members of the ‘crowd’ influences type and sites of activity, as well as project outputs and outcomes. Project creators not only acknowledge the existence of community within crowdfunding, but also consider it an advantage to using crowdfunding:

“...if you got a loan from a bank, you don’t get a crowd of people supporting you”

– creator, Sarvari

This thesis relies on specific illustrations of community provided by project creators to identify components common to community within crowdfunding.

Table 20 catalogues cited illustrations of community with crowdfunding projects included in this research, as identified during semi-structured interviews with project creators. Presence of community within crowdfunding is assessed on a project-by-project basis, as creators were not consistent with terminology (e.g., ‘group’, ‘members’, ‘networks’, ‘crowd’, ‘funders’). The examples provided by creators generally refer to backers (**Table 20**); Chapter 4.4.2 acknowledges the range of backer types possible. Of the twenty-eight projects included in research, only three creators did not mention community (Puppy Protectors, XOAB, You Should Totally Meet).

Table 20: Illustrations of community within crowdfunding, as identified by creators in semi-structured interviews

Project	Communities as identified through this research
Adopt A Bee	LGBT communities; Greenpeace supporters; Polish citizens local to the beehives; digital campaigners
Alien Invaders	Local action groups, individual land managers interested in the topic area of the project
Beez Kneez	Local biking community; bee research/agricultural research community; residents of Minneapolis, where creators live; bee activists; food/market vendors in Minnesota; environmental groups; education groups
Climate for Castrators	Academic community at creator's institution, alumni community, local groups interested in ecology; local Baptist church community
Connecting Blind Children with Tech	Disability activists; tech educators; supporters of the larger Tech Goes Home organization; community around the Citizinvestor platform
Crosswalk Flags	Residents (neighbours) local to the offline problem
Farm to Food Desert	Local communities benefitting from outputs of the project; the larger social justice initiative of which the project is a part; student communities from the affiliated university; university researchers and administrators; those committed to the national and international 'slow food' and whole food movements
Fingersurfing	Fans of 'surf culture'; gadget lovers
HiSBE	Local residents; politicians and various councils; national ethical food movement and social enterprise movements; ethical consumers, internationally
Homeroom	Locals to the restaurant; supporters of independently owned restaurants; food lovers, 'foodies', from around the world
Homicide Watch	Inter/national press; journalism and academic communities; social justice communities; local neighbourhoods affected by the work covered by Homicide Watch; journalist and media community
Kollektiv Gallery	Local residents; fellow emerging artists; shop owners and landlords around the city getting a boost through the project; university alumni community
Lucia	International Indian diaspora interested in preservation of language/culture; readers of the creator's blog; fans of the psychological thriller genre of movie; those local to the film shooting sites; local tech and entrepreneurial community in Bangalore
MyHealthEd	University alumni community; Teach for America cohort; professional contacts
Of Monks and Men	University community; those working, studying or researching within the same discipline; rural hometown community
Old College Comics	Fans of collaborations with other artists and writers; attendees at comic conventions

Project	Communities as identified through this research
Oranjezicht	Offline neighbourhood; pre-existing supporters of affiliated activities related to the project (e.g., farmer's market); local farmers / hobbyist gardeners; local restaurant and food-lover population; local non-profits with similar missions
Sarvari	Agriculturalists: hobbyist gardeners, small-scale farmers and growers, gardening organisations; non-GMO food groups; organisations looking to support civic initiatives
Seahorses	Supporters from previous crowdfunding projects; local professional networks; university community (home lab, affiliated departments)
Smoothe Operator	Local professional networks; local food communities of restaurant owners and entrepreneurs
Somerville Mobile Farmers' Market	Those local to the project; other local programs; local health care institutions / community health workers; local research, student and university community; existing supporters of the larger initiative of which project is a part; future beneficiaries of the project
Sprint for Shakespeare	Group of supporters of the library affiliated with the project; Shakespeare lovers; UK-based educators; arts and theatre groups
Stevenson Square	Small business owners in the vicinity of the project; pre-existing supporters of the affiliated non-profit and similar 'greening' initiatives; local groups brought into the project by the local councillor; business community local to the project
Surviving the Savanna	Community of fellow doctoral students; supporters of affiliated research; hobbyists interested in the project output
Touchkeys	Musicians; local industry groups; research and academic contacts; entrepreneurial community

The table above establishes that communities cited share a common cause or interest (e.g., hobbies, such as music and gardening; issues, such as non-GMO agriculture and endangered species; status, such as medical condition or geographic location). Specific illustrations of community activity provided through semi-structured interviews identify further commonalities to community within crowdfunding such as sustained participation over the duration of the project, and contributions in addition to financial donations. Examples include providing project feedback (e.g., Reactive Grip, Touchkeys), initiating promotional discussion across social media (e.g., Canary in a Coal Mine, Sarvari) and offline volunteering (e.g., Oranjezicht, Stevenson Square).

By reviewing these examples, common components to community within crowdfunding emerged:

1. Common cause, shared interest;
2. Emotional *in addition to* behavioural investment;
3. Activity over time;
4. Activity across sites, and;
5. Financial and non-financial outputs.

- 1. Common cause, shared interest** - This interest can be directed towards the project itself, the larger cause with which the project is affiliated, or the project creator. This interest in a project is the catalyst to emotional and behavioural investment.
- 2. Emotional *in addition to* behavioural investment** - Both emotional and behavioural components are crucial to the concept of community within crowdfunding, and are evaluated on a project-by-project basis.

Emotional investment features engagement with the crowdfunding project on an emotional level, indicating a personal vested interest in its success (Section 6.2.4).

Behavioural investment is indicated by specific actions to benefit project development (Section 6.2.5).

Emotional investment does not feature activity, but behaviour alone is not sufficient to indicate community. Rather, emotional investment *in concert with* behavioural investment leads to certain types of crowdfunding activity, such as sustained participation in a project, and non-financial contributions such as feedback, networking, and volunteering. Although not necessarily the case, investment was specifically identifiable within crowdfunding projects as those activities that acknowledge a group, not just individual activity, such as communication among community members.

Indicators of emotional investment, as provided by semi-structured interviews, include:

- Longer-term project involvement;
- Personal storytelling;
- Conversations between backers unrelated to funding, and;
- Illustrations of trust and commitment beyond financial donation (e.g., sharing personal photos, or other identifying information)

In addition to funding, indicators of behavioural investment, as provided by semi-structured interviews, include:

- 'Shared' activity such as communication (creator-backer, backer-backer) and collaboration;
- Activity that takes on project 'work' that would otherwise fall to the creator such as providing publicity, expert feedback, volunteering skills

3. **Activity over time** - Community can pre-date, or be established alongside, project development. Community was unlikely to have one sole illustration within a crowdfunding project (e.g., only involved in one financial donation); illustrations of community tend to feature either sustained involvement over time, or several points of activity along the project timeline. Community was particularly identifiable in the periods preceding and following the live funding, as these were less associated with the funding and transactional activity associated with the project, and therefore highlighted the emotional as well as behavioural investment as discussed in the preceding point.
4. **Activity across sites** - Community can exist offline, online, or both, as illustrated in the case of civic crowdfunding (Section 6.2.6). Examples provided by creators indicate that community within crowdfunding is rarely limited to one site of activity. Instead, community within crowdfunding can span across online spaces (e.g., the crowdfunding platform, as well as external sites such as Twitter and Facebook), and also congregate offline (e.g., backers as offline volunteers).
5. **Financial and non-financial outputs** - Of the three creators who cited no

illustrations of community (e.g., Puppy Protectors, XOAB, You Should Totally Meet) two were not successfully funded. By contrast, all projects with communities listed in **Table 20** were successfully funded. Although a small sample, there is the suggestion of a positive relationship between presence of community and project outcomes. Non-financial outputs include things such as feedback, collaboration, and volunteering. These types of non-financial outputs are interpreted as indirectly indicating commitment to a project beyond the transaction.

Across the great diversity indicated in the projects profiled in Table 1, the following highlights the core component parts of community as presented through empirical work (Figure 54):

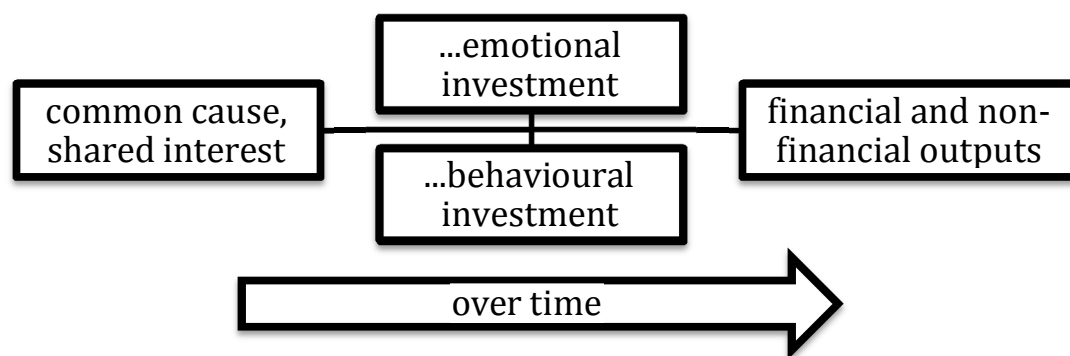


Figure 54: Community within crowdfunding

These component parts will be evaluated through consideration of existing community literature in the following section.

6.2.2 Community as presented in existing research

Although no definition of community within crowdfunding currently exists, the twinning of crowdfunding with community themes is not new, as discussed in Chapter 2.

In order to examine and to validate the emergent perspective of community in crowdfunding as developed through the perspective of empirical work, definitions of community from existing literature were considered.

The topic of community is broad. To manage the scope, this thesis assesses definitions of online community that incorporate an understanding of community establishment and maintenance within the online space consistent with crowdfunding.

Crowdfunding *can* incorporate offline community as well. This is important to acknowledge, and online-offline transitions are discussed in the Stevenson Square example in 6.2.6. However online activity is a constant to crowdfunding, and the definition of community within crowdfunding presented in this chapter is not inconsistent with offline community as observed through empirical work. Similarities between online and offline community are confirmed in other existing research, citing the same forging of relationships between people who share something in common (Kim, 2000).

The following definition of online community serves as a preliminary point of reference:

“...an Internet-connected collective of people who interact over time around a shared purpose, interest, or need”

(Ren et al., 2007, p.378)

Preece (2000) discusses identifying community on a case-by-case basis, differentiating between ‘core’ essential elements and ‘non-core’ elements of community. The preceding section suggested several component parts, which serve as ‘core’ elements to community within crowdfunding:

1. Common cause, shared interest;
2. Emotional and behavioural investment;
3. Activity over time;
4. Activity across sites, and;
5. Financial and non-financial outputs

These are reinforced through existing community literature in the following ways:

- 1. Common cause, shared interest** - The definition above (Ren et al., 2007) confirms that community centres around a common cause or interest. Other definitions reinforce that online communities focus on commonalities between members (Kim, 2000) and on sharing, defining online communities as places where people “interact

to converse, exchange information or resources, learn or play” (Kraut et al., 2012, p.63).

- 2. Emotional and behavioural investment** - Comparable to the approach of this thesis, which includes both an emotional and a behavioural component, it is common for existing community literature to incorporate a relational, social component as well as a technical, or structural, component within a definition of community.

Often cited as the first definition, Howard Rheingold highlights elements of sociability, emotion and activity in describing virtual community⁴⁵ as:

“...social aggregations that emerge from the Net when enough people carry on those public discussions long enough, with sufficient human feeling, to form webs of personal relationship in cyber-space”

(Rheingold, 1993, p.5)

Other existing definitions of online community identify the presence of both sociability (how individuals interact) and usability (how individuals learn, use, interact with a product or site) components (Preece, 2001), or a combination of social as well as technical choices (Ren et al., 2007). Furthermore, existing literature provides insight into how communities are bound together, such as the idea of common identity theory (individuals attached to a group) and common bond theory (individuals to individuals) (Ren et al., 2007), which will be addressed in greater detail in Section 6.2.4.

Emotional investment is what differentiates community investment from less bonded groups or networks within crowdfunding. This echoes existing community literature confirming the importance of emotional attachment (Zhao et al., 2012) as well as shared goals and collective action (Howard, 2010) to communities.

- 3. Activity over time** - This thesis considers crowdfunding across five periods. Timeline is also pertinent to existing literature on community as, much like time

⁴⁵ Virtual community and online community can be used as synonyms; as addressed in Chapter 1, the term online community is exclusively used in this thesis.

periods of crowdfunding, community also has stages of development. Online communities' evolution can be discussed through distinct life cycle stages, such as inception, creation, growth, maturity, and death (Iriberry & Leroy, 2009). Similar to the time periods outlined in Chapter 5, these life cycle stages of community feature evolving needs and related activity.

More subtly, reference to community ties within crowdfunding are described as “on-going” or “lasting” (Hui et al., 2014b, p.70). These references reinforce the understanding of this thesis that community tends not to have one point of interaction but, rather, indicates relationships and corresponding activity over time.

4. **Activity across sites** - Community within crowdfunding can span across online spaces (e.g. the crowdfunding platform, as well as external sites such as Twitter and Facebook), as well as congregate offline (e.g. backers as offline volunteers).

Online community research addresses how online and offline community can influence each other. Existing research debunks the idea that online weakens offline community, maintaining that online *reinforces* offline community given that online is “integrated into the regular patterns of social life” (Wellman et al., 2002, p.158). Kavanaugh et al. (2005) assert that online community can strengthen both emotional investment and behavioural investment first established offline. This is further borne out across focused illustrations within existing literature, such as a study confirming positive correlation between intensity of Facebook use and strength of offline relationships on a college campus (Ellison et al., 2007). This bi-directionality of benefit between online and offline community conforms to illustrations of community activity across sites within crowdfunding.

5. **Financial and non-financial outputs** - Benefits of community can be both financial and non-financial. As described in Chapter 2, existing work identifies the ways in which community can be linked to a project's financial success (Belleflamme et al., 2014). Also, social media networks – serving as a proxy for community – have been credited as predictors of project success (Moissejev, 2013; Mollick, 2014).

However, existing online community research proposes a wide range of non-financial advantages to community that can be applied to crowdfunding, such as:

- Relational benefits to the group (e.g., feelings of support),
- Benefits of being online (e.g., geographic reach), and;
- Benefits to participants (e.g., empowerment) (Iriberry & Leroy, 2009).

Existing definitions of online community are compatible with crowdfunding, appreciating the variable use of community and including an emotional component consistent with discussion of non-financial components of crowdfunding within this thesis: “any virtual social space where people come together to get and give information or support, to learn, or to find company” (Preece, 2001, p.348).

6.2.3 Community definition and evaluation

Having highlighted the component parts of community within crowdfunding in 6.2.1 and 6.2.2 - common cause or shared interest, activity over time, activity across sites, and outputs, both financial and non-financial – the emergent definition of community within crowdfunding is as follows:

Community within crowdfunding is the linking of people with a common cause or shared interest. This linking is expressed through emotional as well as behavioural investment. Community within crowdfunding can exist wholly online, or both online and offline over the timeline of a project. Community activity can contribute both financially and non-financially to projects.

Empirical work confirms that community can only be evaluated within the context of each project, and illustrations of community conform to the identification of the component parts listed in the definition above.

Evaluation of community in existing literature varies, and both qualitative and quantitative metrics have been used to assess community success (Iriberry & Leroy, 2009, p.10). However, quantitative metrics such as frequency of site visits and number of messages sent between members (Smith & Kollock, 1999), are insufficient for an evaluation of community within crowdfunding as they do not capture the combination of

emotional investment and behaviours. The most cited qualitative metrics for evaluating community success are member satisfaction and quality of relationships (Iriberry & Leroy, 2009, p.10); this relates to the crowdfunding characteristics of shared context, cooperation, and communication.

Community within crowdfunding is varied, including the ability to be active online, offline, or online-and-offline. Furthermore, elements of community (e.g., emotional bonds, strength of relationships) cannot be measured easily. In response, the evaluation of community within this research has proceeded by highlighting examples of community from across the empirical work and isolating commonalities among them. This has generated a list of components common to community within crowdfunding, and an accompanying definition.

Two theoretical lenses (both introduced in Chapter 2) contribute to an understanding of this research and a consideration of community within crowdfunding:

1. Social capital, and;
2. Common identity and bond theory.

1. Social capital can be used to assess communities within crowdfunding. Social capital refers to networks, as well the value that can be derived from these networks (Nahapiet & Ghoshal, 1998). Social capital is characterised by bonds and reciprocity (Coleman, 1988). This is consistent with components of the definition of community within crowdfunding, above, such as the linking of people and their contributions towards projects. Three pieces of existing research that apply social capital to crowdfunding use the theory to understand economic activity and to predict successful project funding (Colombo et al., 2015; Giudici et al., 2013; Lehner, 2014).

Lehner (2014) identifies various types of capital that influence social capital. Cultural capital – shared values, and mutual understanding, for example – helps to build up social capital, and is consistent with illustrations of community provided by project creators (e.g., backers with a common interest in organic farming) (Lehner, 2014, p.487). The identification that social capital can contribute to economic capital (Lehner, 2014) emphasises that social and economic activity need not be divorced from each other. This

is consistent with the understanding of emotional investment reinforcing behavioural investment in community within crowdfunding.

The term “internal social capital” (Colombo et al., 2015, p.2) has been introduced to refer to the social capital generated as a result of the crowdfunding process itself, such as crowdfunding stakeholders interacting on a crowdfunding platform. Colombo et al. (2015) importantly identify that although the purpose of crowdfunding is to secure funding, social relationships often result. Lehner (2014) identifies alliances within projects and skills-sharing that can lead to increased social capital for both creator and backer. Both of these perspectives are consistent with the findings of this thesis. However, although Colombo et al. (2015) highlight crowdfunding’s potential to develop community, their research does not address the potential of pre-existing community, or community beyond the platform. Furthermore, although relationships and reciprocity are acknowledged (Colombo et al., 2015), this discussion is focused on funding results, obscuring a consideration of either non-financial or off-platform activity, both described by creators in this research.

An understanding of individual social capital – as defined by large networks and high levels of trust for the creator – clarifies the potential for a positive relationship between community and project funding (Giudici et al., 2013, p.4). However, despite discussion of size of networks, what is significant to social capital is the *nature* of those networks (Lehner, 2014). While consistent with the empirical work of this thesis, as well as with the work of Mollick (2014) who proposes that size of a creator’s Facebook network positively correlates with project success, this does not capture the diversity of connections that can exist within crowdfunding, or explain why they originate.

2. Common identity and bond theory – understanding ways in which individuals attach to groups, as well as to other individuals - extends the application of social capital, although it has not previously been applied to the case of crowdfunding (Ren et al., 2007). Common identity and common bond theory as presented by Ren et al. (2007) frames crowdfunding within its online context, acknowledges the variety of ways by which stakeholder attachment can occur, and emphasises core themes of this thesis such as non-financial activity both preceding and following the live funding period.

The emotional and behavioural investment of community within crowdfunding will be explored further within this chapter through application of Ren et al. (2007) and illustrations from semi-structured interviews. Applying Ren et al. (2007) to crowdfunding not only helps to confirm the presence of community within crowdfunding, but also identifies specific mechanisms of community, by:

1. Contributing to a deeper sense of the variety of bonds that can be forged across crowdfunding stakeholders, using both common bond and common identity theory;
2. Facilitating the proposal of implications for community within crowdfunding (Table 21), maintaining that design influences attachment and, consequently, activity, and;
3. Suggesting not only that community exists, but specifying how community within crowdfunding might be formed and sustained.

6.2.4 Emotional investment, crowdfunding and community

Emotional investment distinguishes crowdfunding from a purely financial transaction. Continuing the discussion of backers begun in Chapter 4.4.2, individuals, or groups of individuals, can be motivated by connections to:

- The creator;
- Projects;
- Project outcomes;
- A broader subject area related to the project, or;
- A combination thereof.

In the case of the crowdfunded film Lucia, the project brought together Kannada speakers around the globe through a sense of emotional investment:

*“Eventually when the movie was put on the screen, we had in the title notes, in the beginning, we actually put 500 names. And you cannot really read anyone’s names because it’s 500 names in one frame. But in every single screening that I have been part of, even if there isn’t a single person in the audience whose name is there, I’ve seen the crowd cheer...no matter where the crowd is, if you’ve contributed, even a rupee, the crowd sees this as **their film**. And that was one of the lovely moments of crowdfunding.”*

– creator, Lucia

This emotional investment is not only a defining characteristic of community within crowdfunding, but also suggests the potential to develop an engaged audience interested in longer-term project involvement, or non-financial contributions. Emotional investment within this thesis is defined:

1. In terms of bonds of attachment (Ren et al., 2007), different ways in which community members can feel linked, and;
2. By providing illustrations of emotional investment specific to crowdfunding backers

Shared context and group bonds as cornerstones of the emotional component of online communities is a theme that appears in the literature (Bauerlein, 2011; Howard, 2010; Preece, 2000). The work of Ren et al. (2007) on common identity and common bond explains different ways in which communities can be bound together. This work is applicable to crowdfunding as it is both prescriptive and predictive, is flexible to varied articulations, and implies an inherent value to community (Ren et al., 2007). Further, as with this thesis, Ren et al. (2007) establish an explicit link between community attachment, design, and resulting action. However, this work does not incorporate consideration for offline communities, or those that fluctuate between online and offline (Ren et al., 2007). Additionally, although Ren et al. (2007) account for diversity across online communities generally, the specifics of community within crowdfunding in particular are still being refined, so full suitability of application remains pending.

Common identity and common bond are defined in the following way:

“...common identity in the online context implies that members feel a commitment to the online community’s purpose or topic. [...] Common bond in the online context, in contrast, implies that members feel socially or emotionally attached to particular members of the online community.”

(Ren et al., 2007, p.381)

Common identity and common bond are not mutually exclusive in crowdfunding, where projects incorporate both common bond (e.g., friends and family) and common identity (e.g., shared interest in the subject of the project) at once. Although Ren et al. (2007) suggests that common bond can be less stable since it is dependent on attachment to an individual (i.e., if this individual leaves the community, the bond is broken), this is less of a concern across crowdfunding projects where stakeholders are typically bonded to an individual creator, who remains a project constant.

Common identity and common bond can be further deconstructed to identify how connections might be forged. Common identity can be sustained through the following:

- **Social categorisation**, defined as a shared social category, reinforced through common experience (Ren et al., 2007, p.382). For example, the Lucia project, where a backer community was formed through shared interest in the Kannada language;
- **Interdependence**, defined as a joint task, a shared purpose, or a common outcome (Ren et al., 2007, p.382). For example, all crowdfunding projects feature backers contributing together through incremental donations to reach a shared funding goal;
- **Intergroup comparisons**, defined as in-group versus out-group comparisons, and cemented by firmly demarcating these (Ren et al., 2007, p.387). For example, civic crowdfunding projects provided the most pronounced examples of intergroup comparison, where backers identified as being from a specific, shared, offline location (i.e., ‘we’re from *this* neighbourhood, not *that* neighbourhood’).

Common bond, by contrast, can be sustained through the following:

- **Social interaction**, defined as bonds resulting from general sociability and exchange, which build affection, and trust (Ren et al., 2007, p.387). For example, Fingersurfing, where creators regularly engaged in conversations with backers online, or Alien Invaders, where the creator provided offline lectures on the topic of the project to share findings;
- **Personal information**, defined as opportunities to disclose personal information and to share with the group; importantly, this disclosure can create bonds, even in the absence of interaction (Ren et al., 2007, p.387). For example, Canary in a Coal Mine, where a Tumblr page was established during live funding in order for people to share their personal stories;
- **Personal attraction** through similarity, defined as bonds forged through common personal traits (class, race, gender) or shared values (Ren et al., 2007, p.387). For example, Canary in a Coal Mine, where connections were established through a shared medical diagnosis; HiSBE and Sarvari projects that bound stakeholders together through common values such as ethical food and non-GMO agriculture.

As these examples illustrate, crowdfunding may *simultaneously* incorporate common bond and common identity.

Chapter 4.4.2 described several groups of backers common to crowdfunding. The following will revisit several of these groups using the lens of Ren et al. (2007):

1. Friends and family;
2. Supporters of the project or research behind the crowdfunding;
3. Previous supporters of the project or its creator.

These communities need not be mutually exclusive, and also can feature ranges of involvement, care of both “core participants” as well as “peripheral members” (Ren et al., 2007, p.379).

Absent from the list above are ‘wild card factor’ communities, which were occasionally encountered across this research. These are groups that coordinate to support projects due to happenstance and good timing rather than factors within the creator’s control; for example, bonsai tree enthusiasts investing in Surviving The Savanna, or LGBT communities rallying in favour of Adopt A Bee:

“We have the really nice support from the LGBT movement, which...not many people understand why. But there is a big discussion here in Poland about gay and lesbian marriages, and gay and lesbian rights to adopt children. So this [Adopt A Bee] sort of, I would say, resonated, it sort of triggered something ‘adopt a bee’, ‘adoption rights’...”

– creator, Adopt A Bee

Chapter 4 addressed reward seekers and passers-by; across this research, these groups did not have an identifiable emotional investment in the project. Super backers, an illustration of a specific type of crowdfunding community member, can exist across each of the categories above, and so are not discussed independently.

- 1. Friends and family** fit the definition of common bond, in that they are motivated by their relationship with the creator rather than the specifics of the project or its rewards (Ren et al., 2007). In smaller projects, friends and family are often the only community required to achieve successful funding (e.g., Crosswalk Flags). For larger projects, friends and family are often the first community to provide significant funding to a project; this is corroborated in existing research (Agrawal et al., 2015,

2011a). Interviews suggest that this community provides the project with good momentum and, due to an emotional connection, serves to boost morale.

In addition to support from close friends and family, creator interviews indicated that crowdfunding could help revive personal connections, in keeping with Ren et al. (2007)'s suggestion of fostering common bond through social interaction. The process of crowdfunding, involving activities such as Facebook communications, personalised emails, and calls to participation serve to reactivate dormant communities. For instance, family at-a-distance learned of a creator's doctoral work through crowdfunding (e.g., Climate for Castrators), and decade-old Facebook connections were revived and offers of collaborative work proposed thanks to crowdfunding tapping into existing friend communities (e.g., Seahorses). The interest by this community was described as on-going, such as in the following case, where live funding had concluded two years prior:

"...my sister's boyfriend's Dad...when I'm home for Christmas, I tell him about my research now because he wants to know because he was suddenly interested [through crowdfunding]...And I think that the other part that I just didn't quite realise was going to happen, which was that...it was really exciting to be able to show what I was doing in such a detailed way to my community..."

– creator, Climate for Castrators

2. **Supporters of the project or research behind the crowdfunding** fit squarely within an identification of common identity, whereby the backers relate to the project's larger purpose (Ren et al., 2007). Common identity in this case is fostered through social categorisation and intergroup comparison, as described above. In the former, the shared category and shared common experience was illustrated in cases of common research interests (e.g., Alien Invaders), shared medical condition (e.g., Canary in a Coal Mine), and shared hobbies (e.g., Fingersurfing) among others. Intergroup comparison was subtly articulated where intrinsic values were attached to projects; for example, those wishing to take a stand against big chain stores (in the case of HiSBE, supporting ethical and fair trade food). These values-based communities of support showed especially wide geographic spread:

"...we have...the slow food group [as backers], which is a worldwide group, so we have groups like that, that are national, international, that also believe in organic food. And then some environmental groups..."

– creator, Food to Farm Desert

Often, these communities were able to utilise specialised knowledge of the project subject area, for example policy (e.g., Beez Kneez) or science (e.g., Canary in a Coal Mine). This deep knowledge could be articulated through community-generated content, such as in the case of Reactive Grip, wherein the comments on the Kickstarter page were highly focused and precise, providing the creator with extensive feedback for future prototypes. This knowledge was also harnessed by creators for additional project work, such as the case of Sarvari where backer communities became citizen scientists:

“...we could employ the crowd to help us...this was really a citizen science, in its better form...give out small amounts of seed potato to anyone in the crowd who wants to grow them, to assess how we performed in the garden or in the field. And then to harvest, and then to count the harvest, and hope they do well, and then take them into the kitchen and start to prepare them in different ways, as food, and to eat them, and to taste them. to take them all the way through from field to fork.”

– creator, Sarvari

Beyond personal connection, a shared affiliation can also serve as a way to both identify, and to engage with, a community. One affiliation expressed prominently across crowdfunding projects included within the thesis is affiliation to a specific institution. Not surprisingly, this was most strongly illustrated in the case of crowdfunding for academic research, where the affiliation with a university helped identify audiences of alumni, faculty and staff, media connections, and even parents of students:

“...one [backer] was someone...whose daughter was going to start at UGA and...just for that reason wanted to support science at UGA.” – creator, Climate for Castrators

- 3. Previous supporters of the project** or its creator can be explained through both common identity and common bond theories. As described in Chapter 4, these often do not involve new communities; rather, crowdfunding offers a new forum for engagement. This also introduces the concept of various levels of community involvement: communities can be dormant, or they can be active. Dormant communities are those inactive, or never active, preceding crowdfunding. Active communities are those that, in advance of crowdfunding, communicate and coordinate either online, offline, or both (Stiver et al., 2015b).

Ren et al. consider ways in which common identity and common bond attachment can be encouraged across online community.

Table 21 summarises these recommendations, and interprets observations from empirical work that satisfy Ren et al. (2007)'s categories .

Table 21: Types of attachment and crowdfunding implications

Type of attachment	Considerations for implementation (Ren et al., 2007)	Specific crowdfunding implications
Common identity		
1. Social categorisation	Providing spaces for individuals to identify themselves by either objective (e.g., membership) or subjective (e.g., political affiliation) criteria (382).	<ul style="list-style-type: none"> • Providing space on the platform, as well as social media, to share perspective, identity, and experiences. • Incentivising public sharing of experiences, as well as commenting on others'.
2. Interdependence	Mobilizing people to work together towards a goal (e.g., Open Source Software, Wikipedia contributions) (382).	<ul style="list-style-type: none"> • Promoting the group task (i.e., meeting full funding) as a shared initiative, including: communicating when milestones met, and encouraging shared ownership through language (e.g., 'us', 'our', 'we'). • Positioning rewards as shared and public (as relevant).
3. Intergroup comparisons	Encouraging community members to police the boundaries of in/out, tightening the 'in' group links and fostering competition with 'out' groups (387).	<ul style="list-style-type: none"> • Amplifying the competitive element through creator communications (backer groups vs. backer groups; this project vs. another project); backer-generated content could also reinforce this messaging.

Type of attachment	Considerations for implementation (Ren et al., 2007)	Specific crowdfunding implications
Common bond		
1. Social interaction	Providing opportunities for exchanges, both public and private. This includes recognising the value of interactions over time, as well as supplementing online with real-world contact, as applicable. (387).	<ul style="list-style-type: none"> • Diversifying ways in which to foster interactions, whether on-platform, online and offline between stakeholders. • Providing opportunities for both public and 'hidden' activity (e.g., public comment boards, private messaging). • Building a sense of 'co-presence', which could be online (e.g., Facebook page, virtual events held online), formal and informal offline events.
2. Personal information	Designing sites for sociability, both private as well as public (e.g., chat rooms). This also includes sharing personal information to help forge connections (e.g., personal profiles listing hometowns of users) (388).	<ul style="list-style-type: none"> • Enabling on-platform and online ways for backers to disclose information about themselves through various media: text, photo, and video. • Personalising online profiles (e.g., on platform) so that backers can be identified if they so choose by name, location, 'joined since', etc.
3. Personal attraction through similarity	Encouraging interpersonal bonds through similarities, and highlighting similarities across groups (e.g., same profession) (388).	<ul style="list-style-type: none"> • Prioritising personal profile features such as showing what other projects stakeholders have backed, reinforcing consistency of values and parallel interests.

6.2.5 Behavioural investment, crowdfunding and community

Rather than assessing behaviours of community separately, behaviour in this chapter is discussed in light of the emotional investment introduced in the preceding section.

Given the varied articulations of community across the diversity of crowdfunding (**Table 20**), it is not feasible to identify any one activity as specific to community. In response, the behavioural investment of community is considered through two broad categories:

1. Non-financial activity, and;
2. In addition to live funding, activity preceding and following.

Both illustrations of activity extend beyond the core mission of crowdfunding to reach full funding goal during live funding. As a result, this research proposes that these behaviours indicate the presence of community as they have objectives beyond the funding and reward of a project. As stated earlier in the chapter, these are not necessarily exclusively examples of community, but are indicators of community as identified through creator interviews.

1. **Non-financial activity** as a behavioural component of crowdfunding is considered through the lens of existing research on community, with reference to: communication, which includes social interaction (Iriberri & Leroy, 2009; Preece, 2000) and cooperation, including collective action (Hine, 2005; Ren et al., 2007).

Communication implies involvement with at least one other, and is facilitated by community because, as members of a group, there are immediate audiences with whom individuals can communicate. Social media fosters community by providing tools and channels through which individuals can share and exchange. The link between community in crowdfunding and social media has already been suggested, exploring where crowdfunding activity occurs, and what it can facilitate. For instance, research confirms the importance of online sites beyond the platform, citing the positive influence of social media mechanisms on projects (Moisseyev, 2013). Focused consideration of Facebook establishes that the number of Facebook connections correlates to crowdfunding project success (Mollick, 2014).

Communication can happen either online (Facebook posts, Twitter conversations) or offline (face-to-face networking, formal events). Some examples of communications within the context of community include:

- Planning a launch with community members, using existing online fora (e.g., Canary in a Coal Mine)
- Problem-solving with community members: talking about what worked and what did not within the project, creating an “advisory council” (e.g., Crosswalk Flags)
- Engaging with discussion surrounding the project, drafting “a thousand think-pieces” after live funding (e.g., Homicide Watch)

- Helping to validate choices and to reinforce the value of their project through providing feedback or a sense for the strength of the market

“...it’s [crowdfunding]...democratic. It’s the community saying: we want this. Whether it’s the local community, or it’s the national food network community, or social enterprise community or ethical consumerism community...people want it.”

– creator, HiSBE

Occasionally communication also switches between online and offline spaces (Figure 55):



Figure 55: Oranjezicht community member communicating online (posting picture to Facebook) as well as offline (circulating a survey)

Communication was generally recognised by creators as a vital component of crowdfunding projects:

“...the point of crowdfunding generally is not to get money, but to force scientists to try to be able to tell a larger audience about their research in a way that is friendly and in a way that is engaging. So people want to learn, people want to stay connected.”

– creator, Seahorses

Cooperation and collective action is, like communication, also an indication of shared investment. This is often reflected in the language used by creators. For example, Figure 56 shows a recognition that many members of the community have “played a part” whereas other comments explicitly use the term “community” or speak in inclusive terms (e.g., *“we did it!”* [emphasis added]).

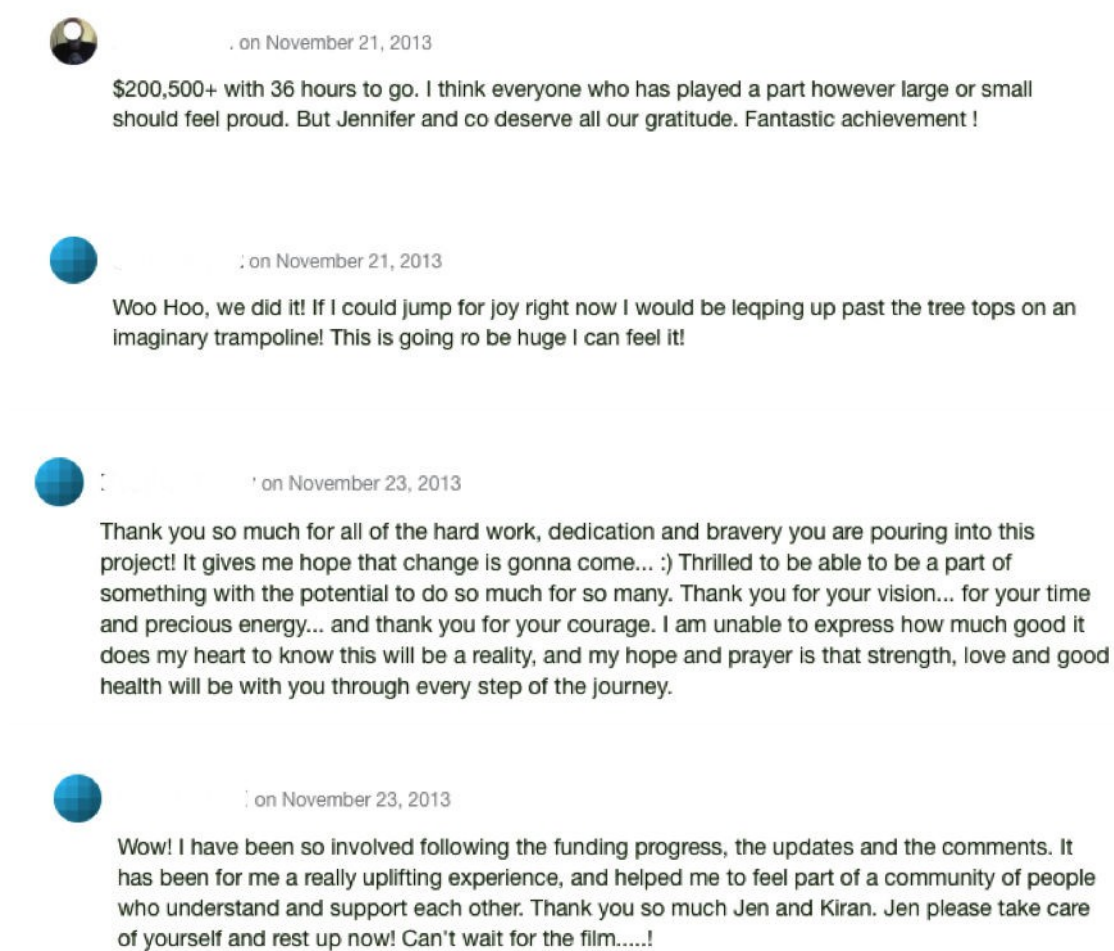


Figure 56: Comments posted to the Kickstarter page of Canary in a Coal Mine

Non-financial activity can also be crucial to project development and even indirectly affect financial bottom lines. Examples of non-financial activity generated by project community members that can have financial implications for projects include:

- Providing pro bono legal services (e.g., Sarvari)

"I mean, one of the crowd wrote to me and said, oh I'm sorry I couldn't come to your open day. But look, I'm a lawyer, and if you have any legal help...I wouldn't mind doing something."

– creator, Sarvari

- Offering free services as a videographer (e.g., Beez Kneez)

"...part of the joy of doing this work in the way that we did it [crowdfunding] is that a lot of people came out of the woodwork to help us. So the woman who did our video...donated her time to do that."

– creator, Beez Kneez

- Aiding the creator (e.g., Lucia)

“...because it was the people’s project I should keep them in the loop. And more and more by doing this, more people were getting interested, and more and more help started coming in. So after 10 days into shooting if I was in trouble in terms of finding a location, there was some random guy on Facebook who’d say: “you can use my house for the shoot”. So that started adding to the project.”

– creator, Lucia

Furthermore, interviews with project creators cite community helping to:

- Test ideas, cutting out the need for a middle man (e.g., Fingersurfing);
- Aid creators in determining “community buy-in” (e.g., Beez Kneez);
- Forge dialogue and communication as “part of the PR plan” (e.g., You Should Totally Meet);
- Identify early investors and brand evangelists (e.g., Smoothe Operator).

This discussion of non-financial crowdfunding activity is not exhaustive, but rather representative of the activity featured across the projects included in research.

2. **In addition to live funding, activity preceding and following** is valuable to document as it emphasises the possibility of community involvement at all of the three primary activity periods across crowdfunding: pre-funding, live funding, and post-funding.

Community is not only active throughout the crowdfunding timeline, but shifts its activity and purpose as the project progresses. This emphasises that community activity can be both creator-initiated and community-initiated. During pre-funding, much of the social media activity was creator-initiated while the community responded with minimal activity. The commencement of live funding provided a focus for communities to rally around, and communication took the form of an active exchange between stakeholders:

“Empowering the students and faculty members who actually need the funds to have a role to play, to understand that not just the professionals in advancement have to go out and find, you know, bags of money lying around...this is a community effort. And the role they [community] can play is having a good project”

– creator, Food to Farm Desert

Community was especially engaged during post-funding, when groups felt a responsibility toward the project and were able to take initiative:

"Maybe it's because of crowdfunding, people have kind of joined in ownership of it [project]. [Person local to the project said] "Hey, I think I have a better design for this bucket; mind if I try it out?" and I was like: "Totally, design away!". So he designed buckets so they didn't collect water...So I guess, yes, they're [final products] owned more by the community."

– creator, Crosswalk Flags

In some cases the illustrations of community activity were consciously cultivated by creators, and its value recognised as relevant to the project,

"...the idea of the farm is based, almost 100%, on getting people out and personally interacting...getting them to talk to each other."

– creator, Oranjezicht

Table 22 outlines the behaviours discussed above and provides examples of projects in which they were illustrated, and maps them onto the time periods outlined in Chapter 5.

Table 22: Community across time in crowdfunding

Crowdfunding stage	Purpose	Community illustration of communication, cooperation and collective action	Project examples
Pre-crowdfunding	Networking and planning	Collaboration and feedback on project materials	Alien Invaders, Climate for Castrators
		Contacting groups and individuals directly to connect around the project	HiSBE, Smoothe Operator, XOAB
		Information sharing: publicising details of the project or larger affiliated initiative	Canary in a Coal Mine
		Planning communications strategy	Climate for Castrators
Live funding	Motivating participation	Rallying around the project through offline activity	Homicide Watch
		Encouraging other backers to contribute more funds, do more networking in favour of the project	Canary in a Coal Mine
		Project promotion and discussion (especially on social media)	Fingersurfing, Sprint for Shakespeare

Crowdfunding stage	Purpose	Community illustration of communication, cooperation and collective action	Project examples
Post-funding	Engagement	Participating in project-related activities including joining committees, attending conferences and lectures, providing offline volunteering, updating each other on progress	Connecting Blind Children with Tech, Food to Farm Desert, Homicide Watch, Oranjezicht, Stevenson Square
		Providing encouragement for future, similar projects	Stevenson Square
		Talking about what did and didn't work; creating an 'advisory council'	Crosswalk Flags
		Continuing social media communication	Homicide Watch, Stevenson Square

6.2.6 Example: civic crowdfunding

Civic crowdfunding is a sub-type of reward-based crowdfunding through which citizens, in collaboration with government, can fund projects providing a community service (Stiver et al., 2015a). Civic crowdfunding projects profiled through semi-structured interviews include:

- **Connecting Blind Children with Tech:** funding digital resources and technology literacy training for blind children in the public school system;
- **Crosswalk Flags:** funding improvements for pedestrian crosswalks to improve road safety;
- **Somerville Mobile Farmers' Market:** funding support and establishing match funding for local residents' access to fresh produce;
- **Stevenson Square:** funding the green development of an urban square.

Existing research considering transitions between online and offline suggests that communities commonly establish themselves offline before moving online (Kavanaugh et al., 2005). This is consistent with the civic projects included in this research. Because civic crowdfunding projects are often neighbourhood-focused, civic crowdfunding tends to incorporate both online and offline community as well as online-offline transitions. This is reflected in features of civic crowdfunding platforms - platforms that exclusively host civic projects – that do not appear in general crowdfunding platforms. For example, civic crowdfunding platform ioby emphasises the physical, offline location of a project

(Figure 57), while Citizinvestor (Figure 58) and ioby (Figure 59) both use the online space to mobilise support offline.

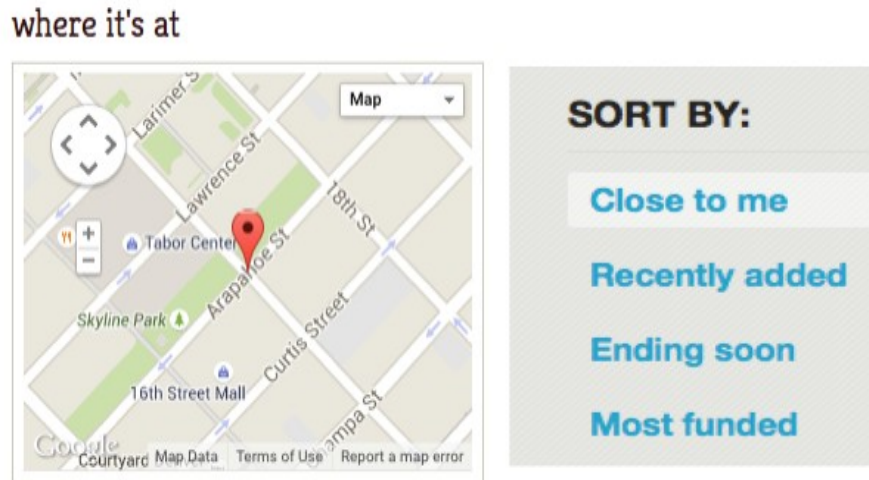


Figure 57: Civic crowdfunding platform ioby focusing on the local element of projects



Figure 58: Example of a Citizinvestor project updates⁴⁶

⁴⁶ This example of an update posted to a project funding for new garbage bins uses online sites to also encourage backers to meet offline (<http://www.citizinvestor.com/project/clean-up-cf-new-bins-in-jenks-park>).

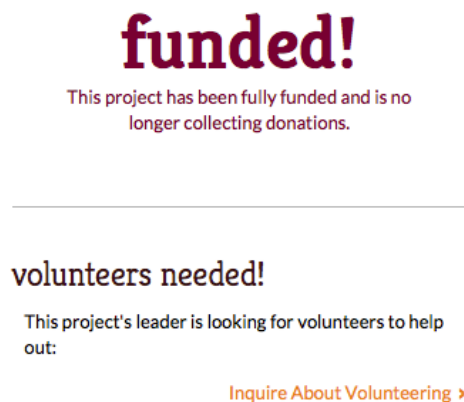


Figure 59: ioby projects using the platform for volunteer recruitment and coordination⁴⁷

The Stevenson Square project, funded on UK-based civic crowdfunding platform Spacehive, provides a focused illustration of:

- All component parts of the definition of community within crowdfunding presented in 6.2.3;
- Online activity, but also the possibility of offline activity within crowdfunding, as well as online-offline transitions, and;
- The ways in which community might benefit crowdfunding, and vice versa.

Stevenson Square was a successfully funded project launched in 2013 to fund a ‘green makeover’ of an under-utilised urban space, with the aim of encouraging public use and foot traffic. The project creators were Red Rose Forest, a Manchester-based initiative *“helping to transform a large part of Greater Manchester...into a greener, better place to live, work and invest in.”* (Salford City Council, 2015)⁴⁸. Funds raised through crowdfunding were targeted for tree excavation and planting, establishment of an edible garden, and building a green roof.

⁴⁷ This project was fully funded (<https://www.ioby.org/project/cooperhigbee-underpass-mural>).

⁴⁸ This description of Stevenson Square was posted to the page of the Salford City Council, a city within the Greater Manchester Area (<https://www.salford.gov.uk/redroseforest.htm>).

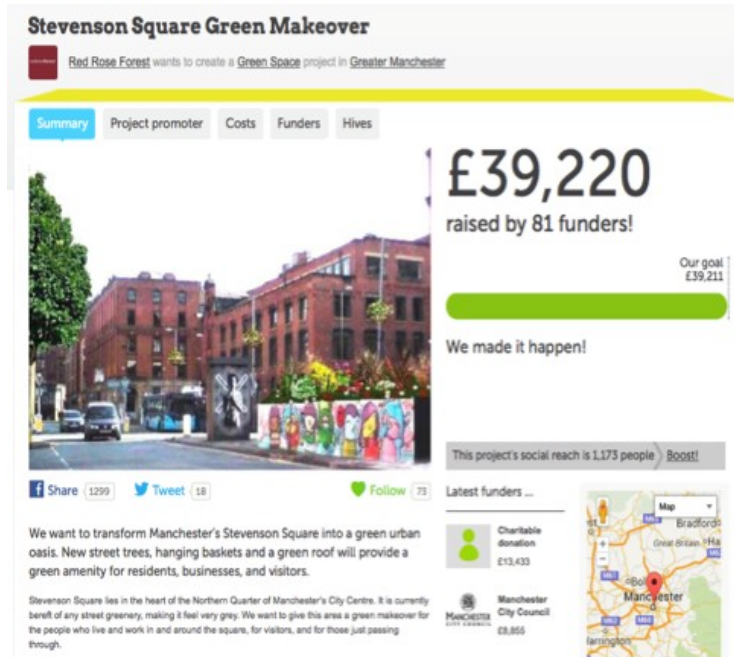


Figure 60: Stevenson Square on Spacehive

Civic crowdfunding is a particularly strong illustration of common identity in that backers identify strongly with the group's shared purpose (Ren et al., 2007). Particularly prevalent in the case of Stevenson square are two community categories discussed in 6.2.4:

- Friends and family, and;
- Previous supporters of the project or its creator.

These communities have a vested interest in successful crowdfunding, as the project output is a shared result: namely, use of the renovated square.

The local community around Stevenson Square – residents, local businesses, those working in the area, as well as various community groups - provided many illustrations of non-financial activity, both online and offline, as well as sustained involvement. The potential for longer-term interactions is encouraged by the nature of civic projects, which are often permanently, and physically, situated in one place (e.g., parks, gardens). For Stevenson Square, examples of non-financial activity include local businesses committing to long-term upkeep of hanging baskets, and a local digital marketing agency maintaining the green roof.



Figure 61: Local community members as volunteers⁴⁹

Support from local groups was not only significant during live funding, but continued beyond the crowdfunding period:

"...a resident's group has gone on to apply for more money to do more greening in the area as well."

– creator, Stevenson Square

Pre-existing supporters of Red Rose Forest and their initiatives around Manchester were strongly represented in Stevenson Square. As described below, these were 'key' sources of support, and were active both online and offline preceding crowdfunding promoting the project:

"...we had some funding from a couple of sources that we worked with before, that understand the importance of green infrastructure. And that helped us - they understood it, too, they knew us, which made it easier for us to make an approach to them. So they weren't obviously the only funders, there were a lot of funders involved. But they were also key players on their own."

– creator, Stevenson Square

In addition to offline non-financial activity, Facebook proved to be a particularly active site of activity for Stevenson Square, both preceding and following funding. Stevenson Square made use of the group Facebook page already established by Red Rose Forest; the advantage in doing so was in inheriting a pre-existing audience, gathered thanks to a shared interest in the greening of Manchester.

⁴⁹ This image of volunteers at the site of Stevenson Square was posted to the Community Forest Trust site: (<http://cf-trust.org/project/northern-quarter/>).

When Stevenson Square was launched as a distinct project, content shared ranged from short shows of support (e.g., Facebook likes) to backer-initiated content. Suggesting both emotional and behavioural investment, Figure 62 shows a comment posted to the project Facebook page in which an individual volunteers themselves for offline work, and proposes further local groups that could contribute to the project.

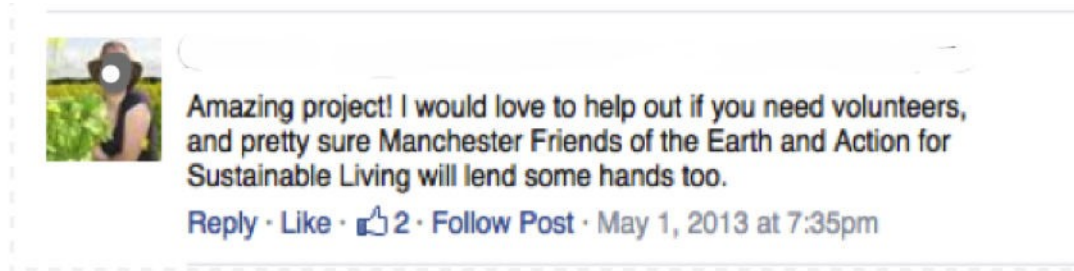


Figure 62: Community member on Red Rose Forest Facebook page

Facebook helped not only to post online activity, but to coordinate offline community activity, illustrating the online/offline transitions possible within crowdfunding.

The Stevenson Square project illustrates the potential for community to influence crowdfunding, but also for crowdfunding to influence community.

In the case of the former, The Stevenson Square project benefitted from existing community groups, not only in the case of funding, but also for activity such as project publicity and marketing as well as soliciting support for other local communities. These groups were able to capitalise on their pre-existing relationships:

"...they [community groups] were very very important because there is a big residential community around there [Stevenson Square]. And also because they used the local businesses like the local cafes, restaurants and bars, and so they were able to spread the message as well. So having the involvement of the local residents group or this specific lobbying group for green infrastructure was essential."

- creator, Stevenson Square

In the case of the latter, Stevenson Square also helped to galvanise community, and to encourage on-going activity, both online and offline:

"I think Stevenson Square really maximised the amount of communication online, and...that has affected us. I think we do a lot more now by Twitter and Facebook, I think it [crowdfunding] has given us the impetus because it has helped demonstrate that there is a big audience out there."

- creator, Stevenson Square

"[crowdfunding is] one way of measuring how people feel they can effect change. By working with us on that [Stevenson Square]...we have a local business...that has signed up to carry out four volunteering events in the year to do work on the green roof. And they seem to be really focused on helping us out because they get something out of it; the staff really enjoy doing it...when I've spoken to their staff when they volunteer they seem to...have some ownership over that green roof because they can really see the fruits of their own labours. So I think that's a good model to demonstrate that if you get businesses involved in helping to physically deliver some work they will take ownership and keep coming back to help out."

- creator, Stevenson Square

Civic crowdfunding provides a specific illustration of community within crowdfunding, showing a common cause and shared interest in keeping with the discussion of emotional investment (6.2.4) and behavioural investment (6.2.5). The example of Stevenson Square in particular features non-financial activity and longer-term involvement across sites of activity consistent with the definition of community within crowdfunding presented in 6.2.3. Furthermore, as civic projects often include a defined group of backers in the form of neighbourhoods local to the project, civic crowdfunding serves as a focused example through which to explore the influence of community on crowdfunding and vice versa, addressed further in the following section.

6.3 How community matters to crowdfunding

The definition of community within crowdfunding (6.2.3) highlights why community matters: community links those with a common cause or shared interest through emotional and behavioural investment; community supports project activity over time and across sites, and; community outputs are both financial and non-financial.

Sections 6.3.1 and 6.3.2 address the possible bi-directional relationship between community and crowdfunding.

6.3.1 How community can influence crowdfunding

Community emphasises the mechanism of crowdfunding through specific *types* of activity. This chapter has highlighted particularly non-financial and collaborative activity, such as communication.

Given the nature of this research it is impossible to isolate community activity and identify its specific influence on success rates of projects. However, the underlying assumption, evident across semi-structured interviews, is that community brings value to crowdfunding, both by influencing both how a project proceeds, and its final outcomes. This research suggests three principal ways in which community can affect projects:

1. **Community facilitates activity**, both financial and non-financial, that benefits a project. Communities not only help propel projects forward through activity, but can also relieve project creators from the full burden of initiating activity (e.g., community volunteer work, community-initiated publicity campaigns). As detailed in Chapter 4, there are various possible types of backer activity. Community is illustrated especially clearly through backer-generated content and non-financial activity, as this requires additional investment beyond the process of funding during the live period.
2. **Community is a vehicle for crowdfunding activity beyond the brief live period**, as it can be active both preceding and following live funding. This simultaneously emphasises the value of longer-term relationship building within crowdfunding, which is illustrated in many of the examples featured in **Table 20**. The presence of a pre-existing community can explain activity preceding the live funding period as well as the first wave of funding once the project goes live. Building networks, (discussed in Chapter 5.3.1 and illustrated through excerpts from the interview with the creator of HiSBE), showed how communities can set the foundation for positive activity during across the project, in their activity preceding live funding. Relationships featuring sustained engagement and emotional investment help to identify community within crowdfunding.

3. **Community fosters both financial and non-financial success.** The projects featured in this research suggest that presence of community could serve as a predictor of crowdfunding success. Furthermore, in the following chapter, underlying principles for project success such as engagement, public communication, and transparency, all link to sociability and are inherently two-way actions of the type common to community. Although confirmation of any relationship between community and successful project funding requires further research, this hypothesis is consistent with findings identifying networking as a predictor of crowdfunding success (Moissejev, 2013; Mollick, 2014).

6.3.2 How crowdfunding can influence community

The approach taken in this research (i.e., the focus on creators) limits the extent to which the bi-directional relationship between community and crowdfunding can be assessed. However, findings suggest that community not only brings value to crowdfunding, but that:

1. Crowdfunding can be used by creators to access community, and;
2. Crowdfunding can benefit community by providing a specific project around which to rally.

1. **Crowdfunding can be used by creators to access community.** In addition to using crowdfunding as a means to fund projects, several creators shared the value of crowdfunding as a process for identifying and engaging community:

"[Crowdfunding] was a good way of reaching out to a community of comic fans and potential readers..."

– creator, Old College Comics

"The whole idea of the crowdfunding has allowed us to promote ourselves to a larger audience, to convince people that we're doing something that is special and that hadn't been done before."

– creator, Sarvari

Through a focused project promoting a common cause or interest, crowdfunding has the potential to identify new community audiences and, as illustrated in the case of Stevenson Square, keep those communities engaged over the longer-term.

2. **Crowdfunding can benefit community by providing a specific project around which to rally.** The Stevenson Square example illustrates how a specific project can strengthen community by bringing together individuals (e.g., local businesses, neighbourhood residents) for a common goal within a fixed project. Creators interviewed also cited a positive “rallying effect” engendered by crowdfunding’s fixed project timeline:

“...this is the thing that I didn’t realise going into it, is...because it [crowdfunding] creates that urgency, I think, and that rallying effect, like, we never would have gotten Homicide Watch Chicago if it wasn’t for Kickstarter.”

– creator, Homicide Watch

Crowdfunding’s precise ‘call to action’ could have positive influence over active and dormant communities alike.

6.3.3 How community may be fostered

Semi-structured interviews showed that project creators have an overwhelmingly positive view of community. Drawing from specific activities shared by creators interviewed that cultivated emotional investment, creators may foster community by:

- Recruiting a key respected person (a community member, an authority or celebrity, someone with strong communication skills) to act as a ‘spokesperson’ (e.g., TouchKeys);
- Developing relationships with creators of similar projects to reach a larger audience (e.g., Seahorses, in which the creator discussed banding together with others crowdfunding for academic research);
- Conveying a sense of ownership to stakeholders. This does not require physical rewards but can be cultivated through a sense of shared project outputs, or even through acknowledgment of contribution and careful communication (e.g., Oranjezicht);
- Demonstrating care for the crowd, rather than concern for funding. This could be achieved through early and regular communication with stakeholders, especially for reasons beyond the financial, or setting up spaces where the crowd can congregate separate from the funding component (e.g., TouchKeys);
- Strengthening bonds through communication; demonstrating that stakeholder input is appreciated, considered, and, where appropriate, acted upon (e.g., HiSBE);

- Reinforcing the group element of community. This can be achieved through language choices ('we', 'our' project, etc.) and by actively encouraging people to self identify by different communities and to share accordingly (e.g., Canary in a Coal Mine);
- Re-engaging with "loose ties" such as former colleagues and acquaintances, rather than focusing exclusively on the most active, or the most obvious, groups of support (e.g., Seahorses).

In terms of behavioural investment, creators interviewed encouraged community activity through:

- Careful deliberation before choosing a platform. This includes considering the different roles of platforms, and how platform features can affect project activity (e.g., civic platforms);
- Providing various opportunities for input along the crowdfunding timeline. In addition to engaging with community during live funding, creators benefitted from asking their community for assistance at various project stages such as in the pre-funding and the post-funding periods (e.g., Fingersurfing);
- Providing various ways to contribute to project conversations through both online and offline channels. This helped strengthen existing community as well as attract new groups (e.g., Stevenson Square);
- Diversifying activities (online, offline) to reach a maximum audience (e.g., Beez Kneez);
- Establishing incremental project goals so, that any amount of money – not necessarily the target amount - can be put to good use, and build community momentum (e.g., Alien Invaders).

Further creator recommendations, understood within the context of project success factors, will be addressed in detail in Chapter 7.

6.4 Summary

This chapter illustrates that not all crowdfunding stakeholders are 'created equal'. There are different types of relationships across crowdfunding, and these can benefit creators and projects in varying ways.

Figure 63 builds on Figure 53 through adding insights to the visualisation of chapter flow.

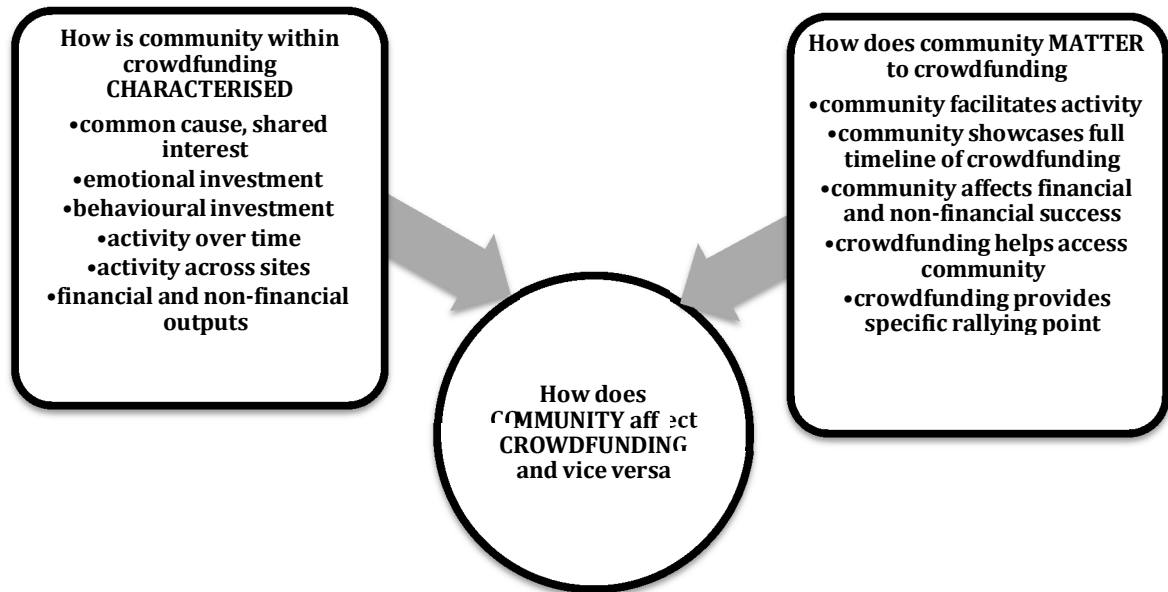


Figure 63: Crowdfunding and community, the flow of insights

This chapter focuses on the relationships possible across crowdfunding. In first outlining the types of relationships provided by platforms, and then unpacking the importance of community as articulated across groups of backers, the aim is to anticipate certain activities, needs and supports within crowdfunding. This approach also makes creators aware of the range of factors influencing crowdfunding project success, and sets a methodological foundation for fostering community that will be explored in detail in Chapter 7.

Section 6.2 illustrates that some projects have a more obvious community focus than others; this was shown to be the case for civic projects (6.2.6) with support groups local to the offline location of the project. However, the range of projects featuring some illustration of community suggests that community forms within a great diversity of projects. Given the numerous benefits across project time periods, a consideration of how to encourage and sustain community within crowdfunding is warranted.

Chapter 7: Maximising success for project creators

7.1 Introduction

This chapter uses the insights from the preceding three chapters to focus on specific implications for creators, asking:

How can creators best maximise success with crowdfunding?

To address this overarching question, two areas are explored, as indicated in Figure 64. The research methods used are detailed with specifics in Table 10 (Chapter 3.6.2).

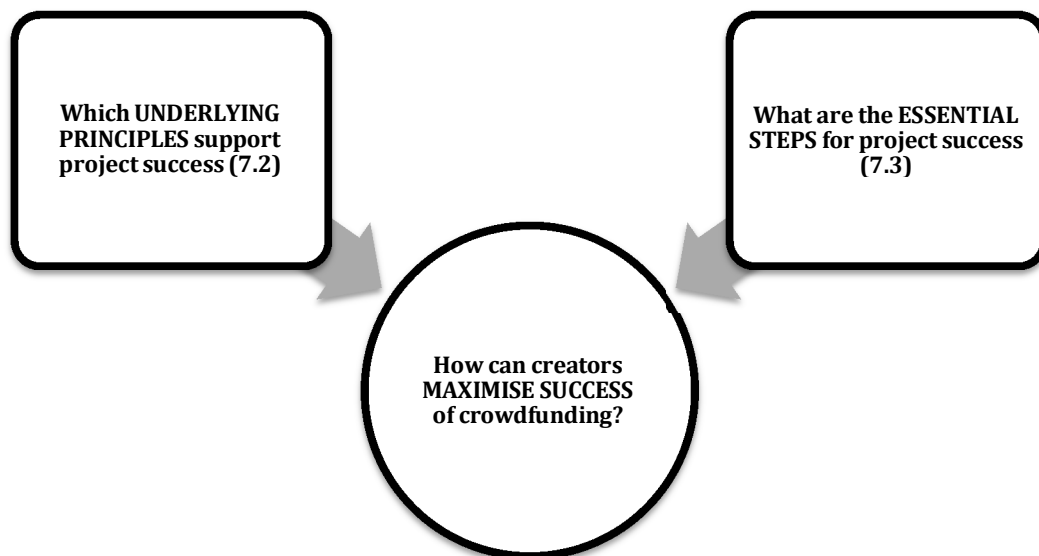


Figure 64: Chapter 7 flow

The conclusions of this thesis fit within the framework provided by naturalistic inquiry (Chapter 3.2.1), which maintains that findings are derived from the particular research context and the resulting data collected, and are therefore unable to provide broader extrapolations. As a result, although this thesis is well-suited to an audience of both crowdfunding researchers and practitioners given its suggestions for maximising project success, findings specifically refer only to the sample described in Chapter 3. Indeed, crowdfunding is variable and uncertain, and the findings of this thesis cannot account for the full range of diversity across all possible project types without further research.

Instead the findings presented serve as working hypotheses based on the empirical work of this thesis, its analysis, and reflection on the themes generated. The idea of positioning working hypotheses as conclusions is further explained in Chapter 8.3.

7.1.1 The concept of success

This thesis adopts a flexible understanding of success within crowdfunding. This approach is consistent with Gerber and Hui (2013) who consider crowdfunding success to extend beyond the purely financial, highlighting varied activity and non-financial advantages. Within this thesis success is assessed on a project-by-project basis, in terms of creator aims, not just whether a project reached its funding goal within the live period. For instance, a creator of a civic project may deem a project to be successful if it builds a neighbourhood community through volunteering, even if not fully funded. Indeed, many creators interviewed used crowdfunding for purposes beyond the financial and, as a result, did not measure their success solely by funds raised:

“To be absolutely honest, our goal was not to raise money. Raising money, I would call a side effect of the project.”

– creator, Adopt A Bee

Despite this flexible perspective on success, financial success is still regarded as the primary metric for crowdfunding. Wherever crowdfunding success is discussed in research, across media sources, and on platforms, the common understanding is of reaching *“the goal – the amount of money they [creators] sought.”* (Mollick, 2014, p.4). In keeping with this definition, Kickstarter’s published ‘success rates’ refer specifically to whether projects were fully funded within the live period.

Since the financial goal is a clearly observable project detail, the projects included in this thesis were classified based on their financial success. However, there is also a conscious acknowledgment of the limiting view provided by an *exclusively* financial assessment.

7.2 Underlying principles that support project success

Three principles are discussed below:

- Public communication (7.2.1);
- Transparency (7.2.2);
- Engagement (7.2.3)

All three principles link to the community discussion in Chapter 6, as they combine emotional and behavioural components. Although these three principles need not be distinct from one another within projects, they are discussed separately for clarity. Section 7.2.4 discusses how these principles can be fostered.

7.2.1 Public communication

Public communication is defined as transmission and exchange of information in a forum accessible to many⁵⁰. This public communication - project information on the platform, social media channels, online fora - is essential across all time periods of crowdfunding. Public communication within successful projects is characterised by frequency, variation across sites, and tailoring of content to different audiences. The link between communication, a non-financial activity of crowdfunding, and community, was explored in Chapter 6.2.5.

Communication within successful crowdfunding projects is best characterised by the following six activities:

1. **Networking** is particularly crucial in advance of live funding, as it helps forge relationships and develops project interest that helps drive crowdfunding participation. This involves communicating both online and using relevant offline channels, as well as highlighting different content and adjusting the 'voice' or form of expression to appeal to various audiences. This communication is typically creator-initiated.
2. **Communicating clearly** when presenting project information may challenge project creators unfamiliar with communicating to a broad, undefined audience. Clear communication is a crucial component of crowdfunding, for which platforms offer guidance to projects before they go live:

"People don't realise how important it is to phrase things properly, which sometimes means that people are just writing improperly. People use phrases like... "times of austerity", and you just can't write like that! You need to take on a really friendly persona. And we try to keep people open. Maybe don't use those phrases that ordinary people don't use."

- Community Manager, Spacehive

⁵⁰ In contrast to 'hidden activity', first described in Chapter 4, Sections 4.3.5 through 4.3.7.

3. **Promoting the project** means providing regular, straightforward information about the project. Even though creators encourage activity on the platform, provide updates on financial milestones, and encourage the public to donate, communication also extends beyond explicitly financial topics. This might include circulation of relevant news, participation in tangential community discussions, and coordination of non-financial activity. In Figure 65, the creator shared a relevant link to a comedian's video on YouTube during live funding, to stimulate interest.

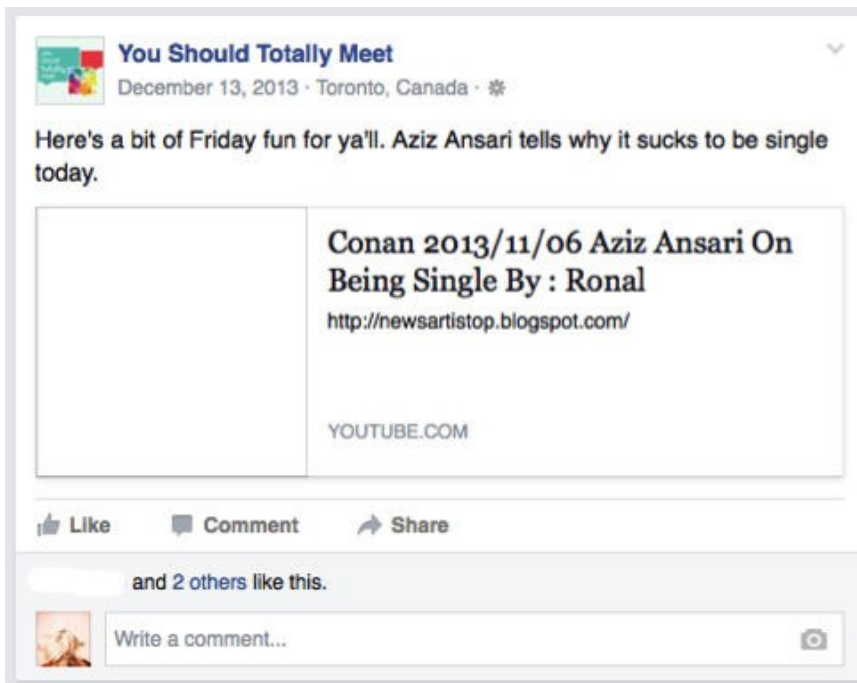


Figure 65: Communication from the creator to the community via Facebook group

Specific communication about a project, such as well-timed updates (Müllerleile & Joenssen, 2015), the inclusion of images and video (Greenberg et al., 2013b) and the use of distinct phrases (Mitra & Gilbert, 2014) have all been identified in existing research as contributing to project success.

4. **Diversifying sites of communication** is essential; every successfully-funded project included in this research had multiple sites of activity. The content on different sites (e.g., platform, Facebook, Twitter) was typically unique to the site, rather than mirrored across all sites.

5. **Finding pre-existing conversation sites** enables creators to join existing discussions and target content directly to an interested audience:

"[Facebook] is where we as a group of artists communicate the most, so we have a Facebook group where we discuss everything..."

• creator, Kollektiv Gallery

6. **Responding to questions and comments** is especially relevant during live funding. This involves acknowledging the discussion and engaging with questions and comments, whether positive or not:

"...we decided that if we saw any negative publicity, it was better for us to reach out and try to respond to it rather than ignoring it."

– creator, XOAB

Figure 66 illustrates the back-and-forth between backer and creator, with the backer letting the creator know of a technical issue with the site. Less than one hour later, the backer received acknowledgment and thanks from the creator:

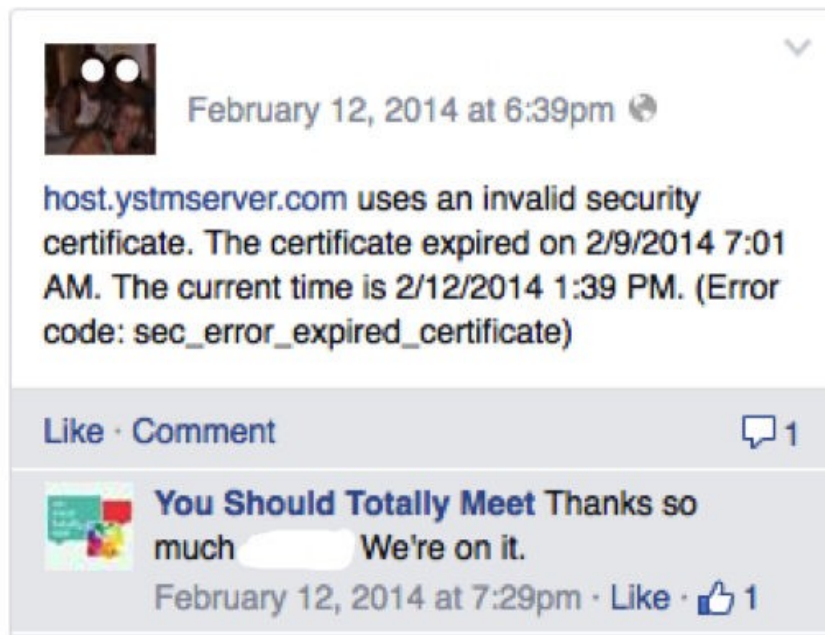


Figure 66: Backer-creator communication regarding technical issue (Facebook)

Whereas at the outset of projects communications are more clearly creator-driven, as projects progress all stakeholders both initiate and respond to project communications.

7.2.2 Transparency

Transparency within a crowdfunding project refers to clearly set goals, articulated outputs, and a creator that is perceived to genuinely share the project with others.

Transparency is related to communication, as transparency can be facilitated through different approaches to the dissemination of information. Transparency can also help cultivate interest buy-in, and a sense of ownership over projects, as stakeholders will develop an emotional investment in a project through more information and different bonds of attachment (Chapter 6.2.4). Existing research has identified that certain crowdfunding activity, such as social media, lends itself to transparency (Moisseyev, 2013).

The onus of facilitating transparency falls to the creator, but transparency is assessed by the backer: “[w]hen weighing up the balance of risk/reward [in crowdfunding], investors [backers] are expected to undertake their own due diligence on the projects that they fund.” (Langley, 2015, p.17). Creators can facilitate project transparency across three specific areas:

- Transparency about the creator as an individual;
- Transparency about the project, and;
- Transparency about project execution and beyond live funding.

1. **Transparency about the creator** as an individual entails the creator sharing their story with the public. A compelling story to share was perceived as a project success factor:

“...having a story that makes a lot of sense, a presence of the creator behind the project as being ‘real people’...”

– creator, XOAB

Creators across this research conveyed personal transparency by detailing who they are as individuals, providing verifiability, and sharing background and affiliations.

- i. **Detailing who they are as individuals** allows creators to share with the public how their project came about within the context of their interests and passions. This merges with public communication (7.2.1) and engagement (7.2.3) but also provides crowdfunding stakeholders a sense of the broader project context and evolution. For

example, in Figure 67, creator Jennifer begins the first line of ‘The Story’ by clearly indicating that she, too, has ME/CFS, just like the individuals for whom she is advocating through her crowdfunding project:

THE STORY

Jennifer, a Harvard PhD student, was signing a check at a restaurant when she found she could not write her own name. Months before her wedding, she became progressively more ill, losing the ability even to sit in a wheelchair. Doctors insisted that her condition was psychosomatic rather than real.

As she dug deeper, she found she had become a part of a hidden world of millions suffering from an illness for which there is evidence dating back to at least the 1930s. The disease, myalgic encephalomyelitis, was re-branded in the 1980s by the CDC as ‘Chronic Fatigue Syndrome,’ a name which became both a punchline and a Rorschach: a wastebasket of undiagnosed conditions hiding a very real disease. Scientists at the country’s top institutions have found evidence of profound metabolic, neurological, and immunological dysfunction in patients with M.E.. However, since the disease is not taught in medical schools, doctors don’t know how to recognize it, effectively denying healthcare to a million Americans.

In *Canary in a Coal Mine*, Jennifer documents her own story and the stories of Jessica, a young British woman who runs a children’s charity from the room that has been her whole world for the last eight years. Howard, an 80s rock publicist-polymath. Mary, an activist. Liisa,



Figure 67: *Canary in a Coal Mine* story, as posted to Kickstarter

Platforms and other sites facilitate this type of sharing, through uploads of photos and videos in which the creators can establish themselves as ‘real’ people, and express themselves through varied media.

- ii. **Providing a firm means of verifying** the creator can be important given the online nature of crowdfunding. Several creators expressed that some backers were wary to participate in crowdfunding due to hesitations regarding security of online payment processing. By providing details in the form of full name, linking to existing social media accounts, or sharing an existing website or blog, creators can help off-set these apprehensions by reassuring would-be backers of their authenticity. This can be accomplished on a variety of online and offline sites, including the platform itself.

For example, platforms commonly state location of the creator, provide a means of contacting the creator, and list other projects backed by the creators. This can help reassure potential backers.

In Figure 68 the creator of Kollektiv Gallery provides a photo, full name, location and details, and links to her Facebook page. The creator also confirms their activity within the crowdfunding community, listing not only the two projects they have created, but also the thirteen projects they have personally backed:

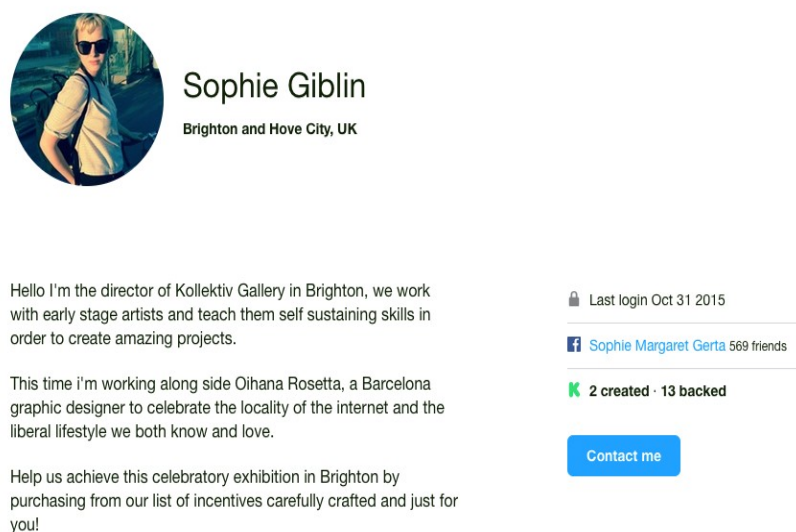


Figure 68: Kickstarter page of Kollektiv Gallery creator on Kickstarter

- iii. **Sharing background and affiliations** can also affect public perception. This entails disclosing whether a creator is independently working on a project, affiliated with an institution, or associated with either a for-profit or non-profit organisation. For example, the projects funded through SciFund Challenge (Alien Invaders, Climate for Castrators, Seahorses) were all pre-vetted; making their affiliations clear to backers could both reassure and influence decision-making regarding participation⁵¹.
2. **Transparency about the project** pertains to providing project specifics that help would-be backers inform themselves and establish how their donations would be put

⁵¹ SciFund Challenge guides scientists through the process of crowdfunding their research (<http://scifundchallenge.org>).

to use. This requires clarity of communication in providing particulars of the project: specifying cost break-downs and project details, sharing project goals and benchmarks, and providing project updates. This transparency can also include details such as contingency plans if the project does not fund, or strategies if the project *overfunds*. Project transparency helps to reassure backers that the creator has given thought to the feasibility of the project beyond funding, and to justify the precise funding amount requested:

“...we had gone back and forth on whether we’d put up exactly the breakdown of what the money would go to. And my sister was like “you should put that right away, that really helped” as someone who was going to contribute. It’s such an abstract dollar amount [the funding goal], who knows what they’re going to spend it on. So that should have happened right away.”

– creator, *You Should Totally Meet*

Some platforms prompt creators to include a funding breakdown (Figure 69, Spacehive). Regardless, this information should be included by all project creators to help reassure backers that creators have carefully considered the entire project process, from funding needs through to successful execution.

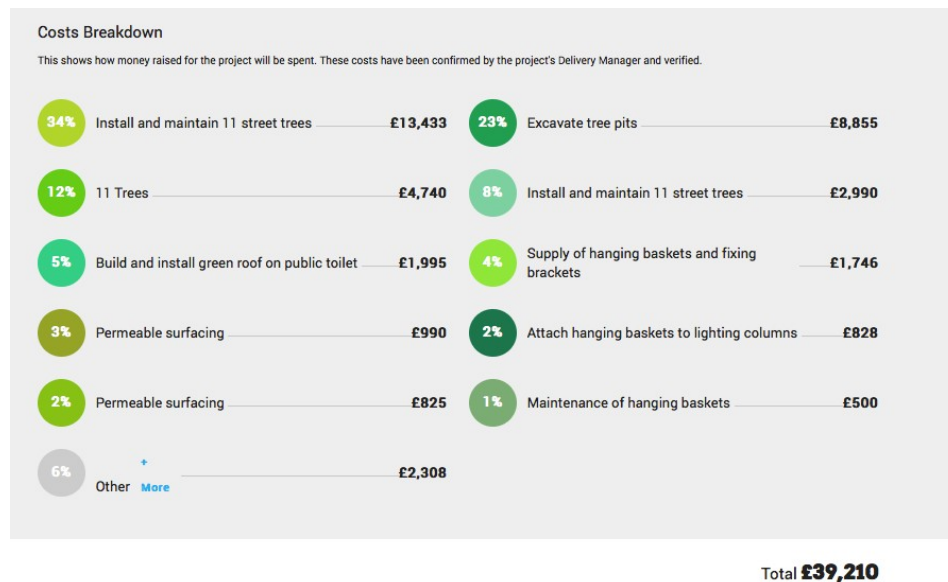


Figure 69: Project costs for Stevenson Square Green Makeover, as posted to Spacehive

An example in which lack of detail formed a barrier to cultivating transparency, Figure 70 shows a “business expansion” project requiring \$1,330 for funding. In terms

of specificity, would-be backers were only told that funding would contribute to “*purchasing a few Kitchen aid mixers*”. Such limited detail can serve as a disincentive to contribute, financially or otherwise. The project did not reach its funding goal.

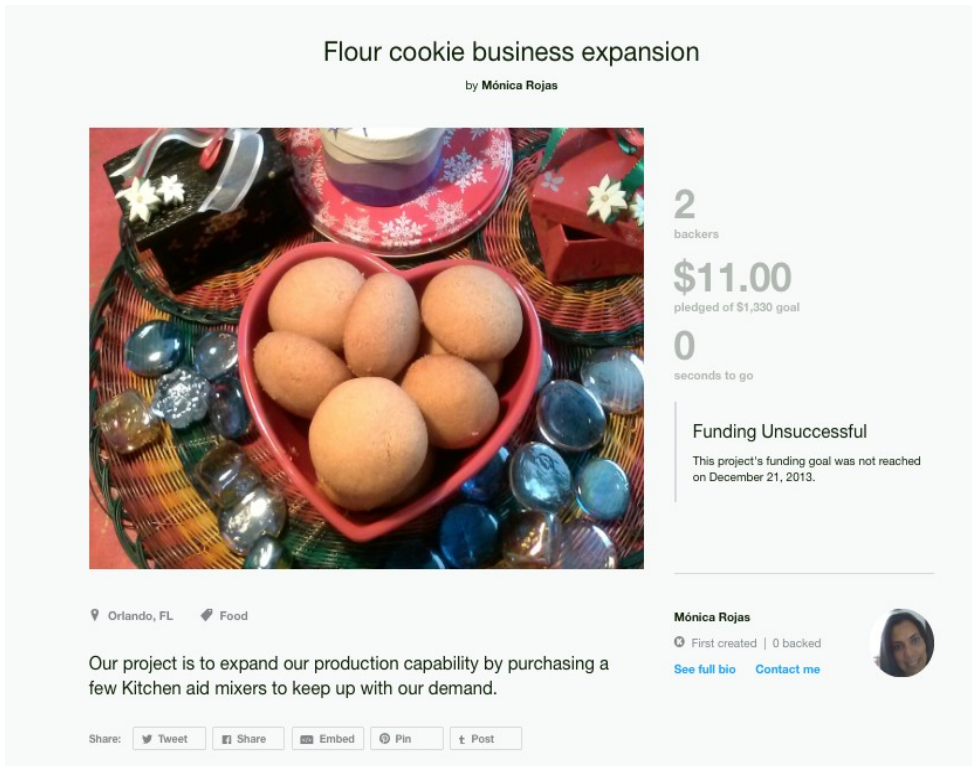


Figure 70: Unsuccessfully funded project that neglected to share important information with potential backers⁵²

During an on-going project, transparency can be forged by sharing various project goals and benchmarks. This includes creators sharing contingency plans and articulating options for what might occur should the project not secure full funding.

- 3. Transparency about project execution and the period beyond live funding** should also be included in creator activity, as it helps to establish longer-term relationships among stakeholders. Keeping backers updated beyond live funding may include updates on project challenges, not just successes.

⁵² Activity can provide valuable transparency and other benefits in terms of positive optics, as it provides a cue to the public that it is an active project. In contrast, projects that have attempted to fund on designated crowdfunding platforms and failed are those that generated no activity either from creator or backers. (<https://www.kickstarter.com/projects/1205051892/flour-cookie-business-expansion?ref=category>)

This helps to cement a relationship of trust between backer and creator early in the process should the project encounter problems, for instance discussing any delays in the distribution of rewards, and explaining their resolution.

Beyond project execution, sharing longer-term project progress also cultivates a sense of transparency. This can include sharing news about how the project has been received, sharing media links when the project has been mentioned, encouraging participation in related initiatives, etc. This activity helps place the project in context, and benefits creators by priming backers for possible continued participation in future projects.

7.2.3 Engagement

Engagement refers to stakeholder – most likely, backer – connection to the crowdfunding project, as well as to its larger mission. All successful projects included in this research had evidence of engaged stakeholders across the project timeline.

Engagement in this context is consistent with the definition of engagement within a business context, in which individuals' personal selves are intertwined with business roles (Kahn, 1990), affecting both the individual's experience and the work completed. This is an extension of the discussion begun in Chapter 6.2.4 that presented engagement in terms of a commitment to the project for not just transactional, but also emotional, reasons.

Engagement is acknowledged as an important piece to crowdfunding, especially with respect to longer-term relationships with backers:

"...how to keep them [backers] engaged, how to find new supporters, how to [keep] supporters you already have engaged, that is a challenge.

...

[engagement is] exactly what mobilisation is about. Because many mobilisation projects, they start with an entry point, petition or whatever, and there is no follow-up...and without this follow-up I think it's worthless."

– creator, Adopt A Bee

Other creators also identified engagement as both a success factor *for*, and a benefit *of*, crowdfunding; further linking it with the concept of community, and identifying the value of the non-financial elements of crowdfunding:

“...the community engagement features of [crowdfunding] have been so humbling, and honouring, and just a really important piece of the [crowdfunding] process for us. Just having that many people support us is just really incredible, and knowing that we are meeting a need in a way...you know, a lot of people are using Kickstarter these days to determine if there is a market for the things that they want to do, or to determine if there is community buy-in for what they want to do. So those pieces were really important to us.”

– creator, Beez Kneez

Engagement within crowdfunding was encouraged by:

1. **Focusing on the shared elements of crowdfunding.** This may help build emotional links between backers and the project. Shared elements could include: the topic of the project, a common geography, same academic institution, etc. (illustrations in 6.2.3 and 6.2.4).
2. **Highlighting the connections that can be built through financial activity.** This can foster on-going engagement through reciprocity and exchange, (this will be discussed in more detail in 7.3.3). The reciprocity created by a backer making a financial donation, and a creator responding with a physical reward (e.g., T-shirt) or communal output (e.g., community garden) is a defining characteristic of crowdfunding. Creators can help to cement this relationship by thanking backers individually for their contributions. This emphasises each individual’s contribution to the project:

“I would usually, before I went to work...comment on people [on Facebook], like peoples’ statuses who had donated, go to work, and then at lunch I would take a break and also do the same thing and see if anyone had donated, send them a thank you on FB, like their statuses, whatever.”

– creator, MyHealthEd

Whether implicitly or explicitly understood, creators across the projects studied recognised the importance of relationship-building and stakeholder engagement within crowdfunding.

3. **Accentuating non-financial activity and benefits within crowdfunding.**

Preceding chapters have explored the value and potential of non-financial activity to crowdfunding at various junctures along the crowdfunding timeline.

Non-financial activity can happen in isolation, or in coordination with financial activity. On-platform, for instance, non-financial activity came in the form of inviting backers to provide feedback on project elements, “...we’d like to invite you to participate beyond pledging...” (Figure 71):

YOUR FUTURE SOCKS.

Your pledges mean everything to us -- we can't do this without you! But we'd like to invite you to participate beyond pledging. Because we have a lot of control over sourcing and manufacturing, we don't have to limit ourselves to one sock variation, or to a small number of designs and colors. Instead of guessing what kind of socks to make, we're asking you, our customer, what you want.

WOOL or COTTON?

For every pair of socks you pledge for, we're going to ask you to choose whether you want them in 18.5 micron Merino wool, or organic, extra-long-staple combed cotton. Mix and match as much as you want.

DESIGN & COLOR.

When our Kickstarter finishes, you'll be able to choose your rewards from the designs and solids you see here, each in a broad range of colors. And in the future, we may ask your opinions on new colors, designs and features because we've built the infrastructure to support your choices as our business grows. Stay tuned.

Figure 71: XOAB's Kickstarter page welcomes contributions beyond the financial

4. **Supporting the longer-term potential for engagement.** This recognises that crowdfunding relationships need not be bound to the live funding period. Indeed, engagement has great potential for the longer-term; those with an emotional connection to the project are not just interested in the point of financial exchange, but have a vested interest in the project execution and implementation.

Several project creators also discussed how engaged backers could be important allies in the case of future crowdfunding rounds (see: Adopt A Bee, Surviving the Savanna). As a result, creators have an incentive to support engagement through project updates, as well as ongoing activities such as site visits.

7.2.4 How to foster public communication, transparency and engagement over time

This section merges details of time periods from Chapter 5 with discussion of relationships structuring crowdfunding in Chapter 6 with the discussion above on public communication, transparency, and engagement. In doing so, it highlights connections and overlaps over time. The resulting recommendations are not necessarily firmly fixed per time period, but are listed where they are most likely to be relevant for creator strategy and project execution.

Table 23: Considerations for project creators regarding underlying principles

Public communication (C), transparency (T) and engagement (E) along the crowdfunding timeline				
Pre-funding	Transition pre-to-live	Live funding	Transition live-to-post	Post-funding
Aim: networking	Aim: publicising and preparing	Aim: motivating participation and driving activity to the platform	Aim: delivering on project promise	Aim: sustaining engagement
C: Communicate online and offline with new and existing connections (e.g., use different sites, and tailor voice and content appropriately).	C: Communicate clearly within project materials (e.g., no alienating, “industry” language); present idea accessibly for a broad audience.	C: Respond to questions and comments promptly and directly.	C: Communicate what will be delivered, and when.	C: Communicate regularly, making use of backer lists, email lists, Facebook groups.
	C: Diversify sites of communication; identify where conversations are happening.			
	C: Promote the project not just through explicit crowdfunding information, but also through sharing additional topically relevant information online and offline.	C: Be active across all channels for both financial purposes (e.g., thanking backers, encouraging donations) and non-financial purposes (e.g. proposing discussion topics, soliciting feedback).		

Chapter 7: Maximising success for project creators

Public communication (C), transparency (T) and engagement (E) along the crowdfunding timeline				
Pre-funding	Transition pre-to-live	Live funding	Transition live-to-post	Post-funding
Aim: networking	Aim: publicising and preparing	Aim: motivating participation and driving activity to the platform	Aim: delivering on project promise	Aim: sustaining engagement
T: Explicitly state creator identity and project story: interests, affiliations and partnerships while networking.	T: Share identity of creator, allowing for verifiability: pictures, links to SM, websites. Use platform features to share the creator's and the project's story.	T: Detail specifics of why money is needed, and what it will be used for, in addition to contingencies and alternate plans should the project not be funded.	T: Update regarding project development, even if there are delays (if possible, explain the delays).	T: Provide longer-term updates regarding the project, including both successes and challenges. Also update regarding on-going creator activities (e.g., media mentions, events, associated work).
		T: State the creator context clearly: individual, organisation, research group? Profit or not-for-profit?		
		T: Communicate goals reached: funding goals, # of volunteers signed up for a specific event, etc.		

Public communication (C), transparency (T) and engagement (E) along the crowdfunding timeline				
Pre-funding	Transition pre-to-live	Live funding	Transition live-to-post	Post-funding
Aim: networking	Aim: publicising and preparing	Aim: motivating participation and driving activity to the platform	Aim: delivering on project promise	Aim: sustaining engagement
E: Network and outreach with different groups can pre-date specifics of a crowdfunding project	E: Assess reward options (physical rewards, shared) to build reciprocity, as well as varied ways in which backers could contribute.	E: Build rapport and reinforce individuals’ caring for the project outcome through acknowledging backer participation as well as building relationships (e.g., personally thanking every backer for their donation).	E: Build anticipation for project execution and, as applicable, delivery on rewards; provide status updates with pictures and engaging context.	E: Arrange online and offline contexts for people to view how funds were put to use (e.g., online place to discuss prototypes received; offline site visits).
	E: Strategise about different elements that can forge bonds within the project, for example: topic of project, geography, institutional affiliation, shared output etc.	E: Emphasise where individual contributions go (e.g., detailing specific influence of donations).		E: Provide ways for backers to continue to contribute and to remain part of the community over the longer term, both passively (e.g., email lists) and actively (e.g., volunteer opportunities).
		E: Use inclusive language, “we” and “us” terms to signal shared ownership over the project.		
E: Provide ways for individuals to contribute in both financial and non-financial ways to foster investment in positive outcomes.				

7.3 Essential steps for project success

Essential steps for project success are the ‘nuts and bolts’ of crowdfunding. These provide details for project implementation and execution. Pairing the preceding discussion of underlying principles (7.2) with concrete steps illustrates the extent to which successful crowdfunding requires consideration across several fronts. Essential steps include:

1. Set timeline (7.3.1);
2. Social media strategy (7.3.2), and;
3. Rewards and reciprocity (7.3.3).

Each will be described and then discussed in terms of specific implications as they relate to platform choice and backers, two important considerations for creators and areas which they can help influence. Finally, these steps will be mapped on to the crowdfunding timeline.

7.3.1 Set timeline

A project creator establishes a set timeline by declaring firm start and end dates for the live funding, which is *“typically between one and three months”* (Langley, 2015, p.15).

A set timeline is important to guide creators’ planning through precise scheduling. Setting a timeline helps map out pre-crowdfunding strategy, indicating the time available to build up networks and to identify sources of support. The amount of time available to the creator might also affect the funding goal set; if a project is only funding for several weeks, a creator must gauge what is a reasonable amount to raise in that time.

One project included within this research that neglected to set a firm funding timeline was unsuccessful in its funding (Defying Dementia). Although just one example, project monitoring suggests that the absence of a firm timeline and a set schedule of goals and activities compromises the momentum of both financial and non-financial project activity.

Different platforms impose different time limits on projects. As per Table 24, Kickstarter limits projects to 60 days' length⁵³ while Indiegogo proposes that 40 days is ideal:

Table 24: Platforms used in research and their restrictions on project timelines

Platform	Stated Project Timeline ⁵⁴
Experiment	Recommended 30 days
Indiegogo	Recommended 40 days
Kickstarter	60 day limit
Spacehive	Recommended: <i>"short and sweet – just a few weeks"</i> Firm: can fund for up to a year
Thundafund	30 – 90 days

In keeping with the insights from Chapter 5, crowdfunding is more than the on-platform live period. Though variable per project, a creator's timeline must budget for crucial networking and pre-planning preceding the live funding, executing the project, and then delivering on the rewards.

Different networks of backers influence a project's set timeline at various stages. As Chapter 5 details, it is typical to see friends and family as primary backers during the initial funding period. It is also typical, mid-way through funding, for there to be a funding lull followed by momentum as the project deadline approaches. Setting a timeline helps to create a sense of urgency:

"...[the] crowdfunding campaign gave that program a bit of urgency that it wouldn't have otherwise. Urgency attached to it."

– creator, Connecting Blind Children With Tech

" ... there's a burst towards the end when there is more urgency and the deadline is approaching."

– creator, Connecting Blind Children With Tech

⁵³ The Kickstarter blog regularly shares thoughts on platform strategy, new features, research conducted internally, and other developments (<https://www.kickstarter.com/blog/shortening-the-maximum-project-length>).

⁵⁴ The platforms, in order of appearance in the Table, explain stated project time limits on their sites: (https://experiment.com/guide/create#project_basics); (<https://go.indiegogo.com/blog/2012/08/indiegogo-insight-length-matters-40-days-and-40-nights.html>); (<http://spacehive.com/Home/Faqs3#d2>); (<https://www.thundafund.com/StaticPages/FAQ.aspx>).

A set timeline directs and prioritises creator activity in keeping with the aims of the time periods across crowdfunding. For example, preceding live funding involves networking with related groups that may have an interest in the project, as well as informing existing primary networks of friends and family of launch. During live funding creators are able to anticipate lulls and plan different incentives or activities to engage various groups.

7.3.2 Social Media Strategy

All successful projects considered within this research use some social media, as described in Chapter 4. Social media was also discussed in Chapter 6.2.5 in the context of a specific type of activity within crowdfunding that can both foster community and have positive implications for project outcomes.

Social media has a role at all junctures of the crowdfunding timeline, from identifying like-minded networks and individuals during the pre-live period, to helping with project promotion during live funding, to sustaining interest and providing project updates post-funding. The importance of social media across the aims of various time periods is detailed in Chapter 5. Social media is also a common topic across existing research featured in Chapter 2; in particular, the ability for social media to provide positive project signals which can help predict project success (Moissejev, 2013; Mollick, 2014).

Platform choice, and the ways in which social media channels are integrated within them, can have implications for the number of views and types of people viewing a project page. Platforms vary in the extent to which they proactively support social media, and how much project promotion depends on individual creator initiative (Chapter 4.4.3, Chapter 6.2.6). Kickstarter strongly encourages creators to develop social media presence, for example, citing that projects with YouTube videos have success rates of 50% (as opposed to 30% for those without)⁵⁵. Figure 72 illustrates a creator experienced with social media, who not only promotes channels of discussion on their project page, but also hashtags to use while participating.

⁵⁵ Kickstarter's 'Creator Questions' page addresses many issues related to establishing a crowdfunding project (<https://www.kickstarter.com/help/faq/creator+questions>).

+++++

Our appeal video has been subtitled in Dutch, Norwegian, Swedish, French, Portuguese, Italian and Spanish [on YouTube](#). Bring it to [your native language](#).

[fb.com/canaryfilm](#) @canaryfilm #seeME #MEAlly

Let's join our voices and shout it loud! Share your chronic illness story at our [storytelling website](#).

+++++

Figure 72: Range of social media for Canary in a Coal Mine shared on Kickstarter page

A project's social media strategy is influenced by the creator identifying the status of the community (no pre-existing community, a dormant community, an active but uncoordinated or underutilised community, or an active community) associated with the project (Chapter 6.2.4). Furthermore, social media strategy can be influenced by size of the project funding goal and the corresponding larger number of backers:

- For smaller-scale crowdfunding projects, goals can often be reached through primary networks alone, tapping friends and family for funding. For example, in the case of ioby's Crosswalk Flags project with a funding goal of 543 USD, the creator only needed to circulate the project information to immediate networks, and the project was fully funded through backers personally known to the creator.

Researcher: *"...are most of the twenty-one [backers] of the crosswalks project known to you?"*

Creator: *"Oh yes, every one of them. I mean, I know all the people who donated; there was no one who came to it from some other place."*

– creator, Crosswalk Flags

- For larger-scale crowdfunding projects, creators required different networking strategies in order to engage with secondary and tertiary networks, as well as entirely new communities. Relatedly, this tends to require more extensive social media strategy, such as setting up project pages and accounts on Facebook and Twitter, amassing followers, and engaging with them regularly. Consequently, the presentation of project content and elements is especially crucial to larger projects where contributions cannot be covered solely by personal relationships. Rewards can have a greater influence on project success than for smaller projects.

Identifying and engaging with backers and would-be backers as well as empowering audiences with information which can then be posted to other social media networks is crucial to the success of larger projects. Social media can identify appropriate media connections as well as target groups for whom the project topic might be of interest.

In addition to focusing on where backers are or, alternatively, creating an online location where individuals can congregate to create communities themselves, social media strategy depends on groups associated with projects in the following ways:

- For projects dependent upon funding from wider groups of backers, public social media pages are needed for publicity and outreach. Projects relying on close networks for funding may find private networks on social media sufficient to secure funding and engage backers.
- For all projects, creators need to assess the range of project audience and related networks. This enables targeting of communication styles and sites. For example, having identified that many scientists engage on Twitter, SciFund Challenge projects (Alien Invaders, Climate for Castrators, Seahorses) required all creators establish a Twitter page to promote their research projects.
- Clarity and care regarding both content and tone is important for all social media. Different social media channels have diverse norms and styles of communication, which can affect content. For example, Twitter's restriction to 140 characters, or Facebook's ability to upload pictures and video in addition to text, could present either challenges or opportunities for projects.
- Social media is particularly critical for engaging geographically dispersed populations not previously known to creators. Social media serves as a place to build initial interest, and then to rally support and to participate in project activity.

7.3.3 Rewards and reciprocity

A defining characteristic of crowdfunding is reciprocity between creator and backer. While this need not be a physical exchange, reciprocity is often cemented through the donation of funds from the backer, and some contribution in response – physical product, shared enjoyment of output, personal thanks – from the creator.

Reciprocity can be either:

- **Direct** or “dyadic” in which the backer expects something back from the creator in particular (e.g., backer donating to Reactive Grip in order to get an early release game controller from the creator), or;
- **Indirect**, in which the backer expects something in return for the community more generally (e.g., backer donating to Lucia in order to both give support to, and get support from, those who speak Kannada) (Ren et al., 2007, p.391).

Empirical work also features instances of, simultaneously, direct and indirect reciprocity (e.g., backer donating to Canary in a Coal Mine to receive a digital download of the film from the creator, as well as to provide support and visibility to those with ME/CFS).

Reciprocity can be fostered by physical rewards, as addressed in detail in Chapter 4. Although crowdfunded products are the most obvious examples of projects that would reward with physical items (see: Figure 73 where the product – socks – were also presented as rewards for backers), physical rewards can also be used creatively; for example, Food to Farm Desert (Figure 73, right image) raised money to develop a farm but rewarded its backers with T-shirts, acknowledgments for donations, seeds, and other physical items.

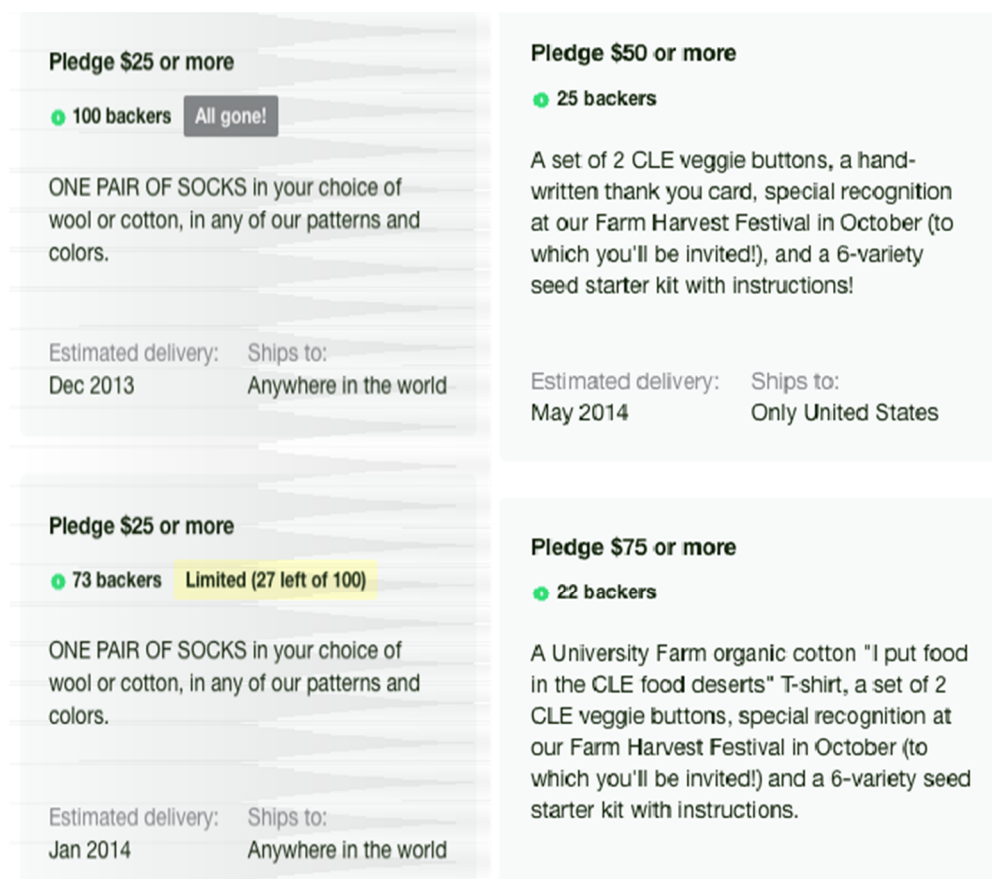


Figure 73: Kickstarter rewards - XOAB (left) and Food to Farm (right)

However, physical rewards are not suited to all projects or project creators. Physical rewards may not align with the project type, the time or the skillset of the creator⁵⁶. This was the case in Climate for Castrators, a project funding scientific research that offered handmade necklaces as rewards:

"...actually allocating time to make things to send to people was the hardest...so the rewards part, and I think, so if I were giving advice to myself for the future, if I did it again I would give rewards that were much more science related."

- creator, Climate for Castrators

⁵⁶ Although rewards are valuable to certain types of projects, and physical rewards are consistently offered in technology and new product projects in particular, it is worth acknowledging that, across the projects included in this research, having a physical reward component did not appear to disproportionately advantage a project towards full funding over those with no physical rewards.

Platforms have responded to the concern raised by the creator of Climate for Castrators. The platform Experiment provides backers with intangible rewards in the form of 'Lab Notes', progress updates on the research which help backers feel part of the research process in return for their financial contribution. This provides reciprocity and on-going relationship-building without the investment required for the production and delivery of physical rewards for projects for which these are less relevant.

The nature of the project can also dictate the range of ways in which reciprocity can be cultivated. For example, projects with a physical offline location often provide symbolic 'rewards' in the form of informal shared enjoyment of the final projects, or attendance at organised formal events such as an offline 'Crowdfunders' Day' (e.g., Oranjezicht, Sarvari). Symbolic rewards are also often implemented, such as having a row of seed named after a backer (e.g., Oranjezicht project on Thundafund, Figure 74). Although a physical reward, these symbolic rewards remains public and therefore differentiated from the individual rewards described previously.

Browse & Buy Rewards

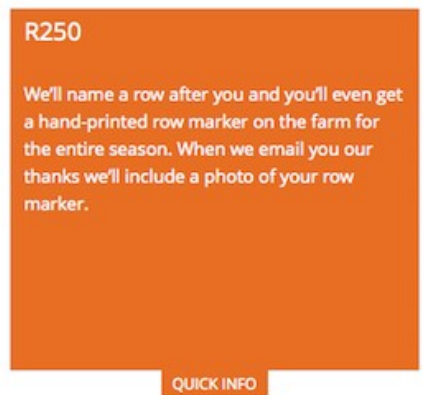


Figure 74: Financial donation reciprocated with a named row of seed

These non-financial, symbolic, or shared rewards highlight the emotional element of reciprocity. Other activities common to crowdfunding that feature bi-directional relationships and exchange, such as mentorship and feedback, can also reinforce reciprocity (Hui et al., 2014b). One creator describes the appeal of exchange and reciprocity within crowdfunding:

"I still like writing those personal emails to people, because...I really like getting the emails back! I find that that's one of the most rewarding things. I got an email from someone I went to high school with when they received a postcard update from the field along with an autographed picture of my research assistant. They wrote back and were like: it's [crowdfunding] the most rewarding thing that they had ever done."

– creator, Seahorses

This emotional connection can occur independently or in coordination with physical rewards. Language used on a platform can also cultivate a sense of ownership and membership through activities such as publicly thanking backers (Figure 75). This continues to reinforce the bonds of community as presented in Chapter 6 (Ren et al., 2007).



Figure 75: You Should Totally Meet creators thanking backers by name

Depending on the project, rewards and reciprocity can feature across various time periods of crowdfunding:

- In advance of funding, with posted rewards serving as incentives to would-be backers to donate;
- During funding, with non-financial activities featuring exchange such as collaboration, and feedback. Creators can stimulate exchanges through activities such as group and personal messaging, opportunities for backer involvement such as

project publicity, and through updates keeping backers up to date on the project process. Reciprocity can also be reinforced through language choice on the platform and ways in which backers are thanked for their project participation;

- Post-funding, with shared outcomes and continued relationships leading to sustained engagement around the project. Reciprocity can strengthen the relationships and emotional investment in crowdfunding (as discussed in 6.2.4), extending beyond the duration of live funding. As discussed in Chapter 5.3.6 some platforms are beginning to recognise this post-funding period, encouraging continued opportunities for stakeholder reciprocity through both financial and non-financial activity (e.g., Kickstarter's 'Spotlight', Indiegogo's 'InDemand').

7.3.4 Essential project steps along the crowdfunding timeline

Table 25 summarises essential project steps over time, identifying key points for activity in the case of set timeline (ST), social media (SM), and rewards and reciprocity (R&R):

Table 25: Essential project steps along the crowdfunding timeline

Set timeline (ST), social media (SM), and rewards and reciprocity (R&R)				
Pre-funding	Trans pre-to-live	Live funding	Trans live-to-post	Post-funding
ST: Establish project timeline: live funding, but also pre- and post-funding.	ST: Establish live project timeline.			
SM: Activity is required throughout, especially for larger projects needing to tap secondary, or entirely new, networks of support				
	R&R: Set physical rewards, as relevant, and match them to different donation levels, as applicable.	R&R: Cultivate reciprocity through creator activity such as thanking individual backers, etc.	R&R: Deliver on physical rewards.	R&R: Sustain reciprocity through larger project updates, continued illustrations of how donations have helped, suggestions for how backers can continue to contribute (financially, non-financially).

Informed by the information above, Table 26 suggests specific questions guiding creators towards successful project decision-making:

Table 26: Considerations for project creators regarding essential steps

Element	Questions for creators to consider
Set timeline	<ul style="list-style-type: none">• Are the timing needs of the project supported by the platform?• Has sufficient time been budgeted for pre- as well as post- live funding?• Is there sufficient time, as well as supports in place, to dedicate to live crowdfunding, given its daily demands?
Social media	<ul style="list-style-type: none">• Are there existing communities relevant to the project? Where are they already active?• How large is the project and its funding goal? Will this require secondary, tertiary, and entirely new networks to fund?• What are the specific needs of the project, and which social media channels are best suited to address those? How is the project best communicated: text, audio, video?• Which platforms are familiar; which may benefit from exploring and skills building?• Do platforms offer the guidance and support needed for creator plans, and creator skillset?• Which public networks can be tapped? Which private networks could be used to project advantage?
Reciprocity	<ul style="list-style-type: none">• Does this project suit physical rewards?• Would fulfilling rewards distract considerably from larger project activity?• What are non-financial ways of emphasising reciprocity, both online and offline?• How can reciprocity be cultivated over time: does the chosen platform have features to help support this?

7.4 The effect of creator experience

Through analysing semi-structured interview transcripts from successful projects, some commonalities shared by creators emerged. Creator experience – familiarity with crowdfunding, existing skillsets, and qualities of creators themselves – can influence project activity and, consequently, success. This section provides illustrations and then outlines implications for creator decision-making.

Previous crowdfunding experience was a notable benefit to projects. Five creators interviewed had either launched multiple crowdfunding projects at the time of interview (Crosswalk Flags, Old College Comics, Sarvari, Seahorses) or were about to launch an additional project (Kollektiv Gallery).

Although a small sample, these examples suggest that creators bring experiential learning from one project to the next, saving time and resources, in addition to benefitting outcomes. That creators drew on previous crowdfunding experience to successfully fund subsequent projects suggests the value of making *implicit* knowledge about crowdfunding *explicit*. This experience not only showed creators what worked with crowdfunding, but also helped inform new directions, for example, a change of platform in the hopes of widening project audience:

"The first one [crowdfunding project] was Indiegogo, the second was Kickstarter. The reason why we went with Indiegogo the first time was because...Indiegogo felt more appropriate; there was a lot of other people at our level who were just kind of trying to get their first book or movie or whatever published, and created, so it just felt appropriate going that route. And the reason why we made the switch to Kickstarter with the second one was because...Indiegogo was great, but we didn't really reach out to new readers, we didn't really reach out to a community...we started talking to people who had done Kickstarter campaigns for their comics they were saying: "well, we really had some success in reaching out to people who we don't even know and the kind of random people just scrolling through Kickstarter looking for new projects...So we said "well, shit, we should go for Kickstarter then, and really try that out this time and see if we have some success doing it that way". And we had a good campaign and we did get, I think, we got more people, more random people than we did on Indiegogo."

– creator, Old College Comics

The perspective obtained from a previous crowdfunding project reinforced what worked well for creators, with first projects providing a template for strategy and implementation for subsequent projects:

"I did end up structuring a lot of my second one based on what I had learned from the first one. So, for example, I similarly asked to fund the salary of a research assistant since it was successful the first time. And I had some of the, some similar rewards, but I changed others...But a lot of it, I would say...I did use a lot of the same tactics as I did in the first round in the second round."

– creator, Seahorses

Many creators acknowledge that their particular backgrounds help them with various facets of crowdfunding, from strategy to execution and visuals. For instance, of the creators interviewed, many came from non-profit and fundraising backgrounds (Beez Kneez, Crosswalk Flags, Oranjezicht, Somerville Mobile Farmers' Market, Connecting Blind Children With Tech), as well as marketing, advertising and design (Fingersurfing, HiSBE, You Should Totally Meet). In these cases, professional experience helped target communication to various audiences, as is important to crowdfunding:

"...I've done fundraising for NGOs more in the traditional sense of you need to go out, get a corporate sponsor, or individual sponsor, and ask them for a donation, [though]..."

- creator, Oranjezicht

"I think we kind of had to use the skills that we had... our background is in advertising. So we were like: ok, that's where we can use...if you're just strictly business in that first month where you try to get funded, then there's a huge danger that your campaign looks boring. And that's, I guess, a good point to have somebody who can deliver the message in a somewhat appealing way. Both in the copy and in the layout."

- creator, Fingersurfing

Several creators interviewed had high levels of technological literacy, such as in the case of the creators of the Of Monks and Men and Old College Comics projects, both of whom hosted websites long pre-dating their crowdfunding projects. Other project creators worked in the fields of computing and technology (e.g., TouchKeys, XOAB), which eased their adoption of the platform online, as well as developing an online strategy:

"I come from tech computing manufacturing...I've spent a lot of time in, I guess social media...trying to figure out how our communication changes, how commerce changes, because of the Internet. So in some ways XOAB was a sandbox for playing with some of that."

- creator, XOAB

Beyond professional training and experience, the interviewed creators also had certain personality traits in common. Bernardino and Santos (2015) similarly address the importance of entrepreneurs' personalities to funding decisions. Generally, creators interviewed were outward-facing, social, keen to share, and regularly in contact with backers as well as a wider audience in the form of one-on-one communications as well as public project updates. Having a 'personality for' crowdfunding helped with the work of a project:

"...so if you were to ask someone "is this [crowdfunding] more work than a day job with a very intense project" the answer is: no. No, it's not a different level of effort, it's a particular kind of effort. If you're not comfortable sending out 500 emails, if you can't write well, if you're not comfortable with the tools and templating; yeah, it's going to be a trek...For someone who is an introvert, doesn't like reaching out to people, and a lot of creative folks are, it can be really hard because they have to get out of their shell...I think a lot of our success is because we engaged, we were very approachable..."

- creator, XOAB

Acknowledging background and personality and its influence on project success could help would-be creators in the evaluation of whether crowdfunding is the appropriate

approach for their projects. Furthermore, it speaks to the importance of building up and promoting various skills-based training and supports (by platforms, by organisations), which could bridge the gap of experience for some creators.

Table 27: Considerations for project creators regarding creator experience

	No experience crowdfunding	Experience crowdfunding
Consider	<ul style="list-style-type: none"> • Why is crowdfunding being considered for this project? • Honestly assess: is outreach, networking, pitching ideas enjoyable to you? 	<ul style="list-style-type: none"> • What was learned from previous crowdfunding? What can be replicated? What needs to be reconsidered? • Is this project equally well-suited to crowdfunding?
Action	<ul style="list-style-type: none"> • Learn basic social media and online communication skills (as relevant) • Look to other projects (successful and unsuccessful) for guidance 	<ul style="list-style-type: none"> • Apply project strengths from previous project (e.g., using same Twitter networks for communication) • Troubleshoot around previous project weaknesses; how can these be avoided?

7.5 Summary

7.5.1 Minimising risk: resources and emotional energy

By addressing how to maximise project success for creators a second advantage is also implied: minimising project risk. Not only can unsuccessful projects be costly to the creator, but they can also redirect resources from other efforts, most notably creator time and emotional energy. Creators expressed the concern that crowdfunding requires a lot of time for the amount of funding raised, especially in comparison to other funding means, such as grants:

“Once I did this Kickstarter I realised how fun it is to write grants...it is actually much less work to write grants, to be honest, than to do a crowdfunding campaign...and it [crowdfunding] doesn’t raise that much in terms of the amount.”

– creator, TouchKeys

Although this creator perspective does suggest acknowledgment of certain added benefits of crowdfunding, it also confirms that perceived crowdfunding risks need to be addressed against those benefits.

It is also worth acknowledging the extent to which creators described crowdfunding projects in emotional terms. Minimising risk for creators relates to concerns of a more personal nature, with creators fearing negative personal impressions of failure, and that unsuccessful projects are left up on platforms beyond the live funding:

"I was a little scared to start doing it [crowdfunding], to be honest, because I mean, I have to make a video that you're willing to put on the Internet that is never going to come down...so...that for me, I think, was the most intimidating part."

- creator, Climate for Castrators

Furthermore, as crowdfunding projects are often driven by deeply personal passions; unsuccessful projects can take a significant personal toll on their creators:

"I don't think people realise how stressful money can be sometimes. If you don't constantly manage it, and it's not constantly on your mind, then it can be really stressful. And when you mix putting your own, putting yourself out there the way you do in Kickstarter, and getting so much validation through money... the stress-factor can be compounded so."

- creator, Old College Comics

7.5.2 Summary and limitations

This chapter consolidates knowledge from preceding chapters and simultaneously positions it for use by creators to maximise project success through two tiers of understanding projects: underlying principles, and essential steps. The effect of creator experience on project results was also discussed.

Relevant questions were developed; these highlight that many considerations are required by creators but that, despite variability across projects, general points of strategy and execution exist. Table 28 summarises these considerations, and points to the additional relevant tables of recommendations.

Table 28: Chapter 7 summary of activity and issues for creators to consider

		Pre-funding	Pre-to-live funding	Live funding	Live-to-post funding	Post funding	Additional information
Underlying principles	Public communication	Networking; outreach to new and existing contacts.	Forging relationships and trust; sharing project and creator details; enabling verifiability; communicating across variety of sites.	Prioritising platform activity; encouraging active participation; responding to backer question and promoting discussion.	Shifting activity off-platform; providing regular status updates both good news and project challenges.	Providing continued project information and updates; showing progress and implementation of funds.	Table 23
	Transparency						
	Engagement						
Essential project steps	Set timeline	Establishing project timeline and work schedule; recruiting help, as necessary. Evaluating the extent to which secondary and tertiary networks are involved.	Choosing platform and rewards accordingly; promoting project work through media and social media channels.	Cultivating reciprocity through platform and social media activity.	Delivering on rewards while maintaining active communication on platform and social media.	Sustaining reciprocity through longer-term communication and project initiatives.	Table 25 Table 26
	Social media strategy						
	Rewards and reciprocity						

		Pre-funding	Pre-to-live funding	Live funding	Live-to-post funding	Post funding	Additional information
Creator experience		Assessing whether the work and style of crowdfunding suits the project and the creator.	Developing creator skill set, as relevant.	Capitalising on online or offline strengths of the creator or related networks for publicity and to generate activity and participation.	Following-through with online and offline activity.	Assessing size of backer network and considering on-going opportunities for engagement.	Table 27

Understanding how creators can maximise success of their projects involves a consideration of underlying principles as well as essential project steps; Figure 76 builds on Figure 64 by adding insights to the visualisation of Chapter flow.

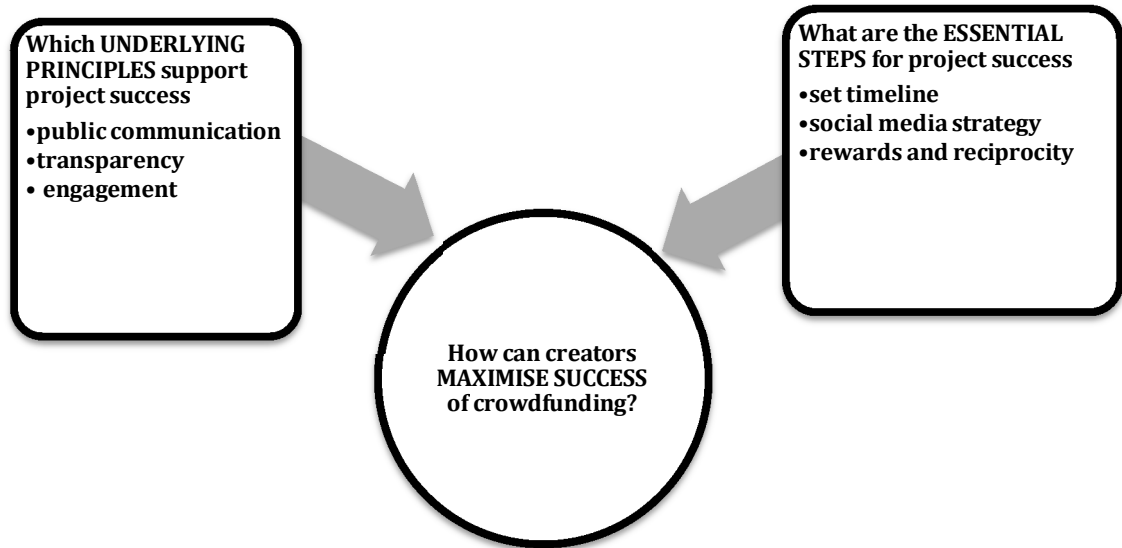


Figure 76: How creators maximise success of crowdfunding: the flow of insights

These two categories of insights – underlying principles, and essential steps - emphasise that some considerations are relevant to all creators. Importantly, they also reinforce the importance of the core themes of time and community as expressed through discussion of topics such as transparency and engagement. Through unpacking these influences, creators are provided with both questions, and actions to consider in preparation for their crowdfunding project.

Chapter 8: Reflections and conclusions

8.1 Introduction

This thesis provides a deeper, actionable understanding of how crowdfunding works by uncovering the range of crowdfunding activity and then considering how this activity relates to project success.

This thesis reports substantial qualitative studies that provide a rich picture of crowdfunding. Through analysis across these studies, and by the application of existing theory, this research presents a detailed account of the component parts of crowdfunding - sites of activity, types of activity, timeline, and community – and unites them within one coordinated understanding of crowdfunding.

This highlights the benefit of considering all these component parts, and the importance of creators' recognition of the variation and coordination of activity across a project.

Figure 77 illustrates the flow of questions across this thesis and Table 29 summarises specific insights from each chapter.

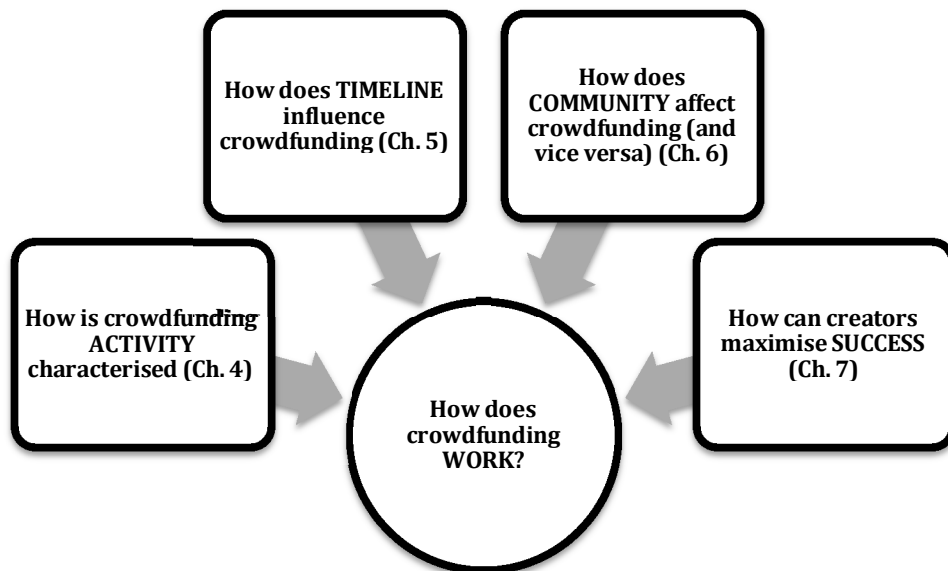


Figure 77: Flow of core questions across this thesis

The principal categories of insights from this thesis concern:

- **Financial and non-financial activity:** Crowdfunding can result in a range of financial and non-financial activities and outcomes. Although crowdfunding centres on raising funds toward a fixed financial goal, the extent to which crowdfunding is also driven by non-financial activity is revealed, and the benefit of non-financial activity to creators, projects, as well as other stakeholders, is discussed.
- **Online and offline activity:** Despite the significant online component of crowdfunding, offline activity is shown to be valuable to crowdfunding, as are other online sites of activity that complement the platform. In discussion of online and offline activity, this thesis also identifies 'hidden' activity that can influence crowdfunding projects, as well as transitions between online-offline activity.
- **Success:** Various understandings of success are discussed, measured in terms of both financial and non-financial outputs.
- **Timeline:** This thesis delineates the crowdfunding project timeline, describing both the activity and the purpose behind three 'action' periods and two 'transition' periods.
- **Community:** Crowdfunding has many stakeholders - creators, backers, platforms, and beneficiaries. The sociability of crowdfunding is framed through discussion of community, incorporating two components: emotional investment and behavioural investment. It is by considering these components in tandem that certain activities, such as the prevalence of non-financial and backer-generated activity within

crowdfunding, can be understood. Furthermore, the twinning of emotional and behavioural activity helps to explain factors such as sustained involvement over time, due to a deeper investment in the project.

- **Maximising success:** Findings about activity and about which factors contribute to project success are consolidated into ‘underlying principles’ and ‘essential steps’, providing guidance for creators.

Insights as they relate to the overarching questions and sub-questions structuring the core content chapters are further summarised in Table 29.

This remainder of this chapter presents an overview of this research, including a discussion of significance of findings (8.2) as well as limitations (8.3). The chapter concludes with suggestions for how this research could be developed for future work (8.4).

Table 29: Questions and insights per chapter

<i>HOW does crowdfunding work?</i>			
Chapter	Overarching Question	Sub-questions (section)	Key insights derived
4	How is crowdfunding activity characterised	WHAT is the specific activity across crowdfunding (4.2)	<ul style="list-style-type: none"> • public vs. 'hidden' activity • 5 types of activity • financial donation • original content • liking others' activity • sharing content • visiting
		WHERE does crowdfunding activity occur (4.2)	<ul style="list-style-type: none"> • on-platform • off-platform, but online • offline
		WHY, what purpose do different activities serve (4.3)	<ul style="list-style-type: none"> • financial • non-financial • focused on project • beyond project
		WHO drives crowdfunding activity (4.4)	<ul style="list-style-type: none"> • creators • backers • platforms • beneficiaries
5	How does time influence crowdfunding	WHAT are the time periods of crowdfunding (5.2)	<ul style="list-style-type: none"> • three action periods: pre, live, post • two transition periods: pre-to-live, live-to-post
		WHAT activity occurs per time period (5.3)	<ul style="list-style-type: none"> • core and non-core activity • pre-funding: networking and planning • live funding: motivating participation • post-funding: engaging • pre-to-live transition: publicising and preparing • live-to-post transition: delivering on promises

HOW does crowdfunding work?			
Chapter	Overarching Question	Sub-questions (section)	Key insights derived
6	How does community affect crowdfunding and vice versa?	HOW is community within crowdfunding characterised (6.2)	<ul style="list-style-type: none"> • common cause, shared interest • emotional investment • behavioural investment • activity over time • activity across sites • financial and non-financial outputs
		HOW does community matter to crowdfunding (6.3)	<ul style="list-style-type: none"> • community facilitates financial and non-financial activity • community showcases full timeline of crowdfunding • community affects financial and non-financial success • crowdfunding helps access community • crowdfunding provides a specific rallying point for community
7	How can creators maximise success of crowdfunding	WHICH underlying principles support project success (7.2)	<ul style="list-style-type: none"> • public communication • transparency • engagement
		WHAT are the essential steps for project success (7.3)	<ul style="list-style-type: none"> • set timeline • social media strategy • rewards and reciprocity

8.2 Significance of findings

As per Macht and Weatherston (2015), the findings of this research benefit two areas: the academic community interested in better understanding crowdfunding as a field of research, and the applied ‘crowdfunders’, those interested in the successful execution of crowdfunding projects.

For the former, this thesis builds upon themes from existing research and also identified where the empirical work driving this thesis is situated within the landscape of crowdfunding research.

For the latter, this thesis provides empirically-grounded suggestions about how to plan and execute projects. Chapter 4 provides foundational information, Chapter 5 and Chapter 6 detail key factors structuring crowdfunding (time and relationships, respectively) and Chapter 7 distils this information into recommended actions.

8.2.1 Understanding crowdfunding and related research areas

This research project (2012 – 2015) was conducted at a crucial juncture in crowdfunding’s development: crowdfunding was in its nascent stage when research began, and has developed rapidly over the intervening years.

The scale, detail, and longer-term research process of doctoral work implies that this thesis can serve as an important foundational source about crowdfunding activity and related themes, such as timeline and community.

Additionally, using qualitative approaches, this thesis obtained detailed perspectives directly from creators. In so doing, implicit creator knowledge was made explicit, and themes more challenging to uncover through quantitative work – the influence of time, and the value of community, for instance – were revealed. These contributions help not only to understand crowdfunding, but also to structure future research approaches and directions.

Community is an essential component of crowdfunding, and an important potential contributor to a project's success due to the correlation between community and engaged, sustained project participation (Chapters 5 and 7). In revealing crowdfunding's social component, and the importance of elements such as social networks to project success, this research could help inform continued research into areas such as social media strategy, as well as online and offline community. The nature of crowdfunding, featuring interactions across various stakeholders, and through use of a range of technology, also serves as a valuable case for discussion within the context of social computing. No work prior to this thesis brings together the language and concepts of community within crowdfunding with any detail.

8.2.2 Supporting project creators

In understanding crowdfunding through its activity as well as the categories of stakeholders involved, this thesis makes the implicit contributors to past project successes explicit.

This thesis assists creators in two ways:

First, it provides creators, or would-be creators, with information about crowdfunding, its work, its stakeholders, and its timeline. Making details of the crowdfunding project explicit, especially information that would not likely be accessible to first-time project creators (e.g., range of sites of activity including 'hidden' activity, the periods of crowdfunding that precede and follow the live funding period and specific purposes to each), could help creators assess suitability of crowdfunding for their projects, and anticipate the work required (Chapters 4, 5, 6).

Second, this thesis uncovers underlying principles and essential steps to help guide creators through the project process. It emphasises the extent to which crowdfunding activity is varied across the project timeline. It interprets the observations into recommendations about how to maximise success (Chapter 7).

Both research showing that creators are often surprised by the extent to which crowdfunding is work-intensive (Hui et al., 2012) and statistics illustrating the extent to which project success rates can be improved, point to need for and utility of such empirically-grounded guidance .

8.3 Limitations

The introductory chapter (Chapter 1) and the review of research across the crowdfunding landscape (Chapter 2) both provide details to emphasise the scope of this research and place it in context. Limitations of this research were also discussed in the context of methodology (Chapter 3) and creator recommendations (Chapter 7).

Due to the continually developing nature of crowdfunding, the generalisability and relevance of this research to future iterations of crowdfunding are impossible to establish. Nevertheless, the creators and their projects represent variety in terms of size, type and other project specifics, as well geographic and platform distribution. The extent to which the core insights of this thesis emerged as themes across the majority of interviews coded using thematic analysis suggests representativeness across the research sample.

In lieu of generalisability – discussed in more detail in Chapter 3.8.1 – findings of this research are consistent with the notion of a working hypothesis, which simultaneously establishes that findings are derived from a specific research context, but also recognises that findings *may* be applicable to other cases or demographics (Lincoln & Guba, 1985). A working hypothesis is assessed by its transferability, a metric that relies on “congruence between sending and receiving contexts” (Lincoln & Guba, 1985, p.124).

This transferability depends on the ability to assess both research contexts: the context of this research as well as the context to which the hypothesis might be transferred. To that end, this thesis has endeavoured to provide detail of scope, parameters of research, and methodological detail to aid in readers’ full assessment of this research context and to help evaluate its potential transferability.

Three further challenges to the findings include:

1. **The rate at which crowdfunding is changing.** Much growth occurred within the field of crowdfunding during the research timeline (2012 – 2015). The findings refer

particularly to this time period, and to the platforms and geographic areas represented by the creators and the projects profiled. It is impossible to establish long-term relevance of these findings given the rate at which crowdfunding continues to evolve.

2. **The specific nature of crowdfunding stakeholders.** This research focuses on creators through semi-structured interviews, and conclusions are also interpreted for creators. However, research cannot control for the specific nature of these creators. As detailed in Chapter 7, crowdfunding does not suit all projects, or every personality type. If the creator, or the creator's project, does not represent a good fit for crowdfunding, the findings from this thesis may not help.

In addition, the creators featured in this research were overwhelmingly American, British, and Canadian: different cultures and economic environments could conceivably influence application of findings and successful execution of crowdfunding projects. Furthermore, Kickstarter was the most represented platform within this research. Although references to specific features from other platforms were included (e.g., civic crowdfunding platforms in Chapter 6), the findings may not apply to all reward-based crowdfunding platforms.

3. **The focus on crowdfunding success.** There are possible disadvantages to crowdfunding, which were addressed only minimally in this thesis. Crowdfunding has been criticised in response to unsuccessful projects and unsatisfied backers. For example, several high-profile large-scale crowdfunding projects have been the subjects of backer disgruntlement. Oculus Rift, a project hosted on Kickstarter, generated significant negative press when the company was sold to Facebook and the public was left questioning the degree to which project creators are accountable to backers⁵⁷. Projects that fail to deliver rewards to backers generated significant questions about creator trustworthiness and the role of platforms in enforcing follow-through.

⁵⁷ Oculus Rift (<https://www.kickstarter.com/projects/1523379957/oculus-rift-step-into-the-game>) has generated a significant amount of press, both during and long after live funding: (<http://www.indiewire.com/article/the-crowdfunding-backlash-what-do-you-owe-your-backers>)

The Wall Street Journal applied the term “social backlash” (Gamerman, 2013) in relation to crowdfunding to describe the uncomfortable social pressure to donate to an increasing number of crowdfunding projects launched by friends, family and colleagues. Although negative aspects of crowdfunding are beyond the current scope of this research, this thesis does acknowledge that backers may become susceptible to market saturation or crowdfunding ‘burn-out’ as the field grows.

Despite acknowledging that crowdfunding could generate negative sentiments, or may not be an appropriate choice for all projects or project creators, this thesis focuses on an understanding of how crowdfunding works, and guidelines for its support for those choosing to use it.

8.4 Directions for future work

The two principal directions for future work include expanding the research and applying the findings. .

8.4.1 Expanding the research

Future work in terms of expanding research includes:

1. Tracing the longer-term effects of crowdfunding;
 2. Incorporating the perspective of unsuccessful projects;
 3. Adding precision to community within crowdfunding, and validating its influence on projects, and;
 4. Expanding the list of underlying principles and essential steps for success.
-
1. **Tracing the longer-term effects of crowdfunding:** given the evolving nature of the field, there is limited research into the longer-term effects of the crowdfunding process and what happens to creators, projects, and stakeholders beyond live funding. Although this thesis uncovers the five time periods of crowdfunding with detail (Chapter 5), future research could continue to assess the lasting effects of crowdfunding. This could be researched from various perspectives; whether successful creators launch subsequent projects, the nature of the relationships

between the crowdfunding community over the longer term, and financial and non-financial points of engagement and strategy.

2. **Incorporating the perspective of unsuccessful projects:** as discussed in Section 8.3, a limitation of the findings of this thesis is that unsuccessful projects did not feature prominently in this research. Although this thesis takes a positive view of crowdfunding and encourages maximising success, Chapter 7 mentions a related factor; namely, minimising risk. Incorporating unsuccessful projects into future research could add breadth to research, confirm the representativeness of findings, and contribute to an understanding of both success and risk within crowdfunding.
3. **Adding precision to community within crowdfunding, and validating its influence on projects:** this is recommended both to better understand crowdfunding, and to better execute crowdfunding projects.

Chapter 6 represents the theoretical contribution of this thesis, defining community within the context of crowdfunding. However, at this juncture, all existing research referencing community within crowdfunding looks to other online community research. The tacit assumption is that online community research is transferable to crowdfunding. This remains to be confirmed.

Additional work is also required to develop a precise classification for the identification of community within crowdfunding. The ability to identify community would be an advantage to creators, as it points to possible sources of financial and non-financial participation in a project. Identifying community could also inform questions such as where to target communications, or who to engage for longer-term activity. Although Chapter 6 begins this discussion, continued work on the identification and, ultimately, the support and maintenance, of community would be valuable. Further research would also benefit from the inclusion of backers, as this research understands community exclusively from a creator perspective.

Finally, additional research as well as testing is required on a larger scale to confirm and validate what this thesis suggests: that community positively influences

crowdfunding projects and that crowdfunding can also positively influence community.

4. **Expanding the list of underlying principles and essential steps for success.** The underlying principles and essential steps for project success described in Chapter 7 represent strongest findings from the projects included in this research. However, this list cannot claim to be comprehensive. Further research is warranted both to validate proposed findings from Chapter 7 with a larger sample of projects, as well as to contribute additional principles and steps important to the crowdfunding process.

8.4.2 Applying the findings

Future work in the form of application of findings could include:

1. Testing the working hypotheses presented;
2. Considering relevancy of findings to platforms.

1. **Testing the working hypotheses presented.** This thesis had neither the timeframe nor the scope to test the working hypotheses presented in Chapter 7. Testing in the form of validating findings from this thesis as well as expanding reach of application through a larger research sample would both be beneficial.

Future research should engage with the discussion of underlying principles and essential steps on success through organising focus groups with creators, applying these ideas to the execution of future projects, and considering their incorporation within crowdfunding research on a larger scale, which would include a greater number of creator perspectives. Over the longer term, future work could observe the application of hypotheses by creators, and assess the influence of these hypotheses on project success, both financial and non-financial.

2. **Considering relevancy of findings to platforms.** Although this thesis focuses on the creator perspective, platforms themselves are a suitable site for the implementation of findings through design and supports. Although design testing is beyond the scope of this thesis, creator recommendations from Chapter 7 could be used in future work to pivot towards other stakeholder or platform guidelines.

This thesis illustrates ways in which platform features impact how creators and backers experience a project (Chapter 4.4.3). Platforms could be influenced by thesis insights by:

- **Extending platform support and space along the timeline:** platforms are developing ways to keep activity centred on the platform beyond live funding, in the form of the platform as an e-commerce site, or just as a place to continue with updates. These features (e.g., Indiegogo's InDemand; Kickstarter's Spotlight) enable lasting discussion, revision of existing information, and posting of new information. However, there are no platforms that encourage activity *in advance* of live funding. Being able to circulate project links prior to funding, to build up a page (visually, with videos, etc.) could be a good place to have people coming to the platform for news even in advance of the opportunity to contribute financially
- **Encouraging non-financial activity as well as financial activity, and enabling its coordination through the platform:** recognizing the value of non-financial advantages of crowdfunding, platforms could help with:
 - Volunteer coordination;
 - In-kind gifts;
 - Coordination of meet-ups and other social activities on the platform that are not exclusively funding-focused.

Although some of these features already exist on specific platforms, they are not widespread, and future work could consider their value across projects more generally.

- **Supporting networking:** social components such as networking, social media, and emotional engagement are common to the successful projects studied as part of this research. In response, platforms could adopt a more active role in identifying networks, as well as supporting networking on-site (e.g., options to 'save' profiles, to message people with registered profiles on the platform, etc.). Furthermore, platforms could identify projects and creators sharing an interest or aim, in order to facilitate support and mentorship across creators and projects. In the case of platforms exclusively supporting a specific sub-type of project, platforms could foster success by building communities of people with specific expertise, (e.g., civic platforms serving as a connection point between creators, government, public-private institutions, and media).

- **Facilitating training:** although most crowdfunding platforms provide creators with guides to crowdfunding and employ support teams to assist with queries, there remains an opportunity for more proactive creator training and support from platforms. Activities such as webinars or master classes featuring successful former creators could introduce creators to valuable crowdfunding information.

Crowdfunding is a field that is both growing and continuing to evolve. This thesis represents an important step in understanding how crowdfunding works through the lens of its activity. Through this approach, this research has catalogued activity, uncovered themes common across projects, and proposed actionable suggestions in the form of working hypotheses: insights valuable to both crowdfunding researchers and project creators.

Glossary

ACTIVITY

Activity within the context of crowdfunding is any action, online or offline, that can influence crowdfunding outcomes, including direct influences on the funding goal (e.g., the action of donating money and contributing to a project's funding goal) or broader influences on the project process (e.g., social action that helps engage a wider audience, resulting in a larger support base for the project). Activity can occur at any point along the crowdfunding timeline, online or offline, and can be financial or non-financial in nature.

Related:

CORE ACTIVITY

Core activity is activity that the majority of crowdfunding projects incorporate, and that research has identified as critical to crowdfunding success.

HIDDEN ACTIVITY

Hidden activity is activity that contributes to crowdfunding results, but that is neither public nor observable. Within the context of this thesis, hidden activity is generally initiated by the project creator.

NON-CORE ACTIVITY

Non-core activity is activity that research has identified as less critical to the success of a crowdfunding project. This is included on a case-by-case basis per project and – though it may serve one project very well – is not generalisable as activity core to crowdfunding success.

BACKER

A backer is a member of the 'crowd' supporting a specific crowdfunding project. Support can be financial (providing funds) or non-financial (providing publicity or other project support). Backers can be known to creators in advance of the project, or be unknown members of the public. 'Backer' is used in this thesis in lieu of 'funder' in order to include those who contribute to a project through non-financial means.

BENEFICIARY

A beneficiary is an individual who benefits from the output of the crowdfunding project, but who is not a backer. Beneficiaries are most common in the case of civic and social good crowdfunding projects, where those groups able to fund and support the project (backers) are distinct from those having a need for the goods or services that the successful project could provide (beneficiaries).

COMMUNITY

Community within crowdfunding is the linking of people with a common cause or shared interest. This linking is expressed through emotional as well as behavioural investment. Community within crowdfunding can exist wholly online, or both online and offline over the timeline of a project. Community activity can contribute both financially and non-financially to projects.

Related:

ACTIVE COMMUNITY

Active community refers to groups pre-dating the crowdfunding project who have channels in place through which they are already communicating and coordinating activity.

DORMANT COMMUNITY

Dormant community refers to groups that have the potential to display the characteristics and undertake the activity common to community, but that are inactive, or have never been active, preceding crowdfunding (Stiver et al., 2015a, 2015b).

CREATOR

A creator is the initiator of a crowdfunding project. The creator is directly responsible for the execution of the project and for beginning, as well as monitoring, its activity.

The creator is often a single individual, but a project can also have creators: several individuals, a larger team, group, company or institution. In the case of larger organisations, the 'creator' is often the special events, communications or social media manager.

CROWDFUNDING

Crowdfunding is an online process through which a project creator funds a project through incremental donations from a 'crowd' of backers. This process is often achieved by means of an online crowdfunding platform, and supplemented by social media and other non-financial activity. Offline elements, such as promotional events, are also frequently present.

CIVIC CROWDFUNDING

Civic crowdfunding is sub-type of reward-based crowdfunding whereby citizens contribute to funding community-based projects ranging from physical structures to amenities. Civic crowdfunding projects often are executed in collaboration with local governments and feature public, shared outputs (e.g., community garden, swimming pool) (Stiver et al., 2015a).

DEBT CROWDFUNDING

Debt crowdfunding is a type of crowdfunding model through which backers lend money to creators, who then repay that money over time.

EQUITY CROWDFUNDING

Equity crowdfunding is a type of crowdfunding model through which backers become investors, and their financial contributions give them shares – or equity – in the creator's company

REWARD-BASED CROWDFUNDING

Reward-based crowdfunding is a type of crowdfunding model characterised by awarding a symbolic 'reward' to backers in return for their contribution.

'Reward' can appear in many different forms across reward-based crowdfunding: physical or intangible; individual or collective; one-time or incrementally distributed.

CROWDSOURCING

Crowdsourcing is a process through which action is outsourced to the skills of an undefined 'crowd' (Howe, 2006). Crowdfunding is a specific type of crowdsourcing.

FUNDING GOAL

The funding goal is the amount of money the creator aims to raise for their project through crowdfunding.

LIVE FUNDING

Live funding is the time period during which a project is actively collecting funds towards its goal. Most rewards-based platforms limit the time allowed for this period. E.g., Kickstarter live funding for projects is capped at 60 days' length

PLATFORM

A crowdfunding platform is a designated online site that hosts crowdfunding projects. This site is where creators post project information, and backers donate funds. Platforms are generally linked with a third party payment processor (e.g., PayPal, WePay) and include features such as comments sections and embedded social media.

Related:

GENERAL PLATFORM

A general crowdfunding platform is one that accommodates many different types of projects, e.g., Indiegogo and Kickstarter.

SPECIALISED PLATFORM

A specialised crowdfunding platform is one that hosts only projects of a certain type, e.g., Citizinvestor, Experiment, Hubbub.

PROJECT

A project is the term for each individual crowdfunding initiative. A project has a specific aim, is initiated by a creator, obtains funds and support from backers and, typically, makes use of a designated crowdfunding platform. A project collects funds during the live funding period.

STAKEHOLDER

A stakeholder is any individual with a vested interest in the success of crowdfunding. Within this thesis, crowdfunding stakeholders include: backers, creators, crowdfunding platforms, and project beneficiaries.

TIMELINE

Timeline refers to a progression, a chronology, of crowdfunding activity that is common across all crowdfunding projects. Time in this case does not refer to a fixed amount, or to a set schedule. This thesis identifies five distinct periods to the crowdfunding timeline – three action (pre-funding, live funding, post-funding) and two transition (pre-to-live and live-to-post) periods.

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Appendix 1: Semi-structured interview project details

Social media abbreviations as used throughout the appendices	
G+	Google+
FB	Facebook
I	Instagram
P	Pinterest
Tu	Tumblr
Tw	Twitter
V	Vimeo
Y	YouTube

Creator interviews (n = 28) featured in research through semi-structured interviews	
1. Adopt A Bee	
Platform	No designated platform: https://vimeo.com/109194664
Project type	Social good
Successful	Y
Ask / raised	(Approximately) 20,000 euro (amount unsure due to technical glitch)
#backer	Over 5,000
Social media and websites	None
2. Alien Invaders	
Platform	RocketHub: https://www.rockethub.com/projects/11819-alien-invaders-armed-and-dangerous
Project type	Research (#SciFundChallenge)
Successful	Y
Ask / raised	600 / 600 USD
#backer	14

Appendix 1: Semi-structured interview project details

Creator interviews (n = 28) featured in research through semi-structured interviews	
Social media and websites	FB Personal page
	Tw https://twitter.com/lorenamsmith
	Website http://sites.bio.indiana.edu/~reynoldslab/
3. The Beez Kneez	
Platform	Kickstarter: https://www.kickstarter.com/projects/thebeezkneez/revive-the-hive-with-the-beez-kneez-honey-house
Project type	Social good
Successful	Y
Ask / raised	35,000 / 39,960 USD
#backer	828
Social media and websites	FB https://www.facebook.com/TheBeezKneezDelivery
	Tw https://twitter.com/BeezKneezHoney
	V https://vimeo.com/62470078
	Website http://www.thebeezkneezdelivery.com
4. A Climate for Castrators	
Platform	RocketHub: http://www.rockethub.com/projects/7476-a-climate-for-castrators
Project type	Research (#SciFundChallenge)
Successful	Y
Ask / raised	1,200 / 1,231 USD
#backer	28
Social media and websites	FB Personal page
	Tw https://twitter.com/alysssssssg
	Y https://www.youtube.com/watch?v=v4iLDKE7pYc

Creator interviews (n = 28) featured in research through semi-structured interviews	
5. Connecting Blind Children With Tech	
Platform	Citizeninvestor: http://www.citizeninvestor.com/project/connecting-blind-children-with-tech
Project type	Civic (/social good)
Successful	Y
Ask / raised	6,480 / 6,480 USD
#backer	47
Social media and websites	FB https://www.facebook.com/techgoeshome/
	Tw https://twitter.com/TechGoesHome
	V https://vimeo.com/51301930
	Y https://www.youtube.com/user/TechGoesHome
6. Crosswalk Flags	
Platform	ioby: https://www.ioby.org/project/crosswalk-flags
Project type	Civic
Successful	Y
Ask / raised	543 / 543 USD
#backer	21
Social media and websites	FB personal page
7. Eat Mac and Cheese! Homeroom	
Platform	Kickstarter: https://www.kickstarter.com/projects/664530000/eat-mac-and-cheese-0
Project type	Food
Successful	Y
Ask / raised	7,000 / 7,646 USD

Appendix 1: Semi-structured interview project details

Creator interviews (n = 28) featured in research through semi-structured interviews	
#backer	98
Social media and websites	FB https://www.facebook.com/Homeroom510
	Tw https://twitter.com/homeroom510
8. Farm to Food Desert	
Platform	Kickstarter: https://www.kickstarter.com/projects/cwrufarm/farm-to-food-desert
Project type	Food (/social good)
Successful	Y
Ask / raised	32,091 / 34,514 USD
#backer	204
Social media and websites	FB https://www.facebook.com/CWRUFarm/
	Tw https://twitter.com/cwrufarm
9. FingerSurfing	
Platform	Kickstarter: https://www.kickstarter.com/projects/917665757/fingersurfing?ref=nav_search
Project type	New product
Successful	Y
Ask / raised	15,000 / 21,742 USD
#backer	841
Social media and websites	FB https://www.facebook.com/fingersurfers/
	I https://www.instagram.com/fingersurfers/
	Tw https://twitter.com/TokeLotz
	Website http://www.fingersurfers.com
10. HiSBE	
Platform	Buzzbnk: https://www.buzzbnk.org/hisbe

Creator interviews (n = 28) featured in research through semi-structured interviews	
Project type	Social good
Successful	Y
Ask / raised	30,000 / 30,820 GBP
#backer	338
Social media and websites	FB https://www.facebook.com/hiSbeFood/
	P https://uk.pinterest.com/hisbefood/
	Tw https://twitter.com/hiSbe_Food
	Website http://hisbe.co.uk
11. Homicide Watch	
Platform	Kickstarter: https://www.kickstarter.com/projects/1368665357/a-one-year-student-reporting-lab-within-homicide-w?ref=nav_search
Project type	Social good
Successful	Y
Ask / raised	40,000 / 47,450 USD
#backer	1,110
Social media and websites	FB https://www.facebook.com/Homicide-Watch-DC-121936297867647/
	Tw https://twitter.com/homicidewatch
	Website http://homicidewatch.org
12. Kollektiv Gallery (2 crowdfunding projects; one in progress at time of interview so detail not provided)	
Platform	Kickstarter: https://www.kickstarter.com/projects/kollektivgallery/kollektivs-first-ever-gallery
Project type	Arts
Successful	Y
Ask / raised	3,500 / 3,615 GBP
#backer	86

Appendix 1: Semi-structured interview project details

Creator interviews (n = 28) featured in research through semi-structured interviews	
Social media and websites	FB https://www.facebook.com/kollektivgallery/
	Tw https://twitter.com/kollektiv_
	V https://vimeo.com/77131673
13. Lucia	
Platform	No designated platform: http://pawanthefactor.com/?page_id=1653
Project type	Arts
Successful	Y
Ask / raised	5,100,000 RS
#backer	Over 100
Social media and websites	FB https://www.facebook.com/luciathefilm/
	Tw https://twitter.com/projectlucia
	Website https://twitter.com/projectlucia
14. MyHealthEd	
Platform	Microryza (now Experiment): https://experiment.com/projects/myhealthed
Project type	Research
Successful	Y
Ask / raised	25,000 / 25,129 USD
#backer	245
Social media and websites	FB Personal page
	Tw https://twitter.com/myhealthednc
	Website http://myhealthed.github.io/myHealthEd/index.html
15. Of Monks and Men	
Platform	Experiment: https://experiment.com/projects/of-monks-and-men-how-medieval-construction-brought-monasteries-and-lay-communities-together

Creator interviews (n = 28) featured in research through semi-structured interviews	
Project type	Research
Successful	Y
Ask / raised	2,350 / 2,350 USD
#backer	21
Social media and websites	FB Personal page
	Tu http://monksandmen.tumblr.com
	Tw https://twitter.com/monksandmen
16. Old College Comics (2 projects)	
Platform	Kickstarter and Indiegogo: https://www.kickstarter.com/projects/oldcollegecomics/old-college-comics-presents-a-comic-anthology
Project type	Arts
Successful	Y (both)
Ask / raised	Kickstarter: 2,000 / 2,274 USD Indiegogo: 3,000 / 3,510 USD
#backer	K: 60 I: 57
Social media and websites	FB https://www.facebook.com/OldCollegeComics
	Tw https://twitter.com/oldcollegecomic
	Website http://oldcollegecomics.com
17. Oranjezicht	
Platform	Thundafund: https://www.thundafund.com/ozcf
Project type	Food (social good)
Successful	Y
Ask / raised	10,000 / 30,950 ZAR

Appendix 1: Semi-structured interview project details

Creator interviews (n = 28) featured in research through semi-structured interviews	
#backer	58
Social media and websites	FB https://www.facebook.com/OZCFarm/
	Tw https://twitter.com/ozcfarm
18. Puppy Protectors	
Platform	WWF's own Earth Hour Blue crowdfunding platform: https://www.youtube.com/watch?v=kfxgZ5A67s0
Project type	Social good
Successful	N
Ask / raised	43,571 / 3,234 USD
#backer	93
Social media and websites	FB https://www.facebook.com/earthhour
	G+ https://plus.google.com/+EarthHour
	I https://www.instagram.com/earthhourofficial/
	P https://uk.pinterest.com/earthhour/
	Tu http://earthhour.tumblr.com
	Tw https://twitter.com/earthhour
19. Sarvari (2 crowdfunding projects)	
Platform	Buzzbnk: https://www.buzzbnk.org/sarvari
Project type	Social good
Successful	Y (both)
Ask / raised	1: 10,000 / 10,020 GBP 2: 20,000 / 41,945 GBP
#backer	1: 146 2: 193
Social media and	FB https://www.facebook.com/sarpopotatoes

Creator interviews (n = 28) featured in research through semi-structured interviews	
websites	Tw https://twitter.com/sarpouk
	Website http://sarpo.co.uk/home/
20. Seahorses (2 crowdfunding projects)	
Platform	Experiment and RocketHub: https://experiment.com/projects/searching-for-seahorses-sustainability
Project type	Research (#SciFundChallenge)
Successful	Y (both)
Ask / raised	1: RocketHub 2,400 / 2,701 USD 2: Experiment 2,400 / 3,040 USD
#backer	1: 63 2: 36
Social media and websites	FB Personal page
	Tw https://twitter.com/l_aylesworth
21. Smoothe Operator	
Platform	Indiegogo: https://www.indiegogo.com/projects/smoothe-operator-smoothie-juice-truck#/story
Project type	Food
Successful	Y
Ask / raised	13,000 / 13,026 CAD
#backer	81
Social media and websites	FB https://www.facebook.com/SmootheOp
	I https://www.instagram.com/smoothe_op/
	Tw https://twitter.com/smoothe_op
	Website http://smootheoperator.com

Appendix 1: Semi-structured interview project details

Creator interviews (n = 28) featured in research through semi-structured interviews	
22. Somerville Mobile Farmers' Market	
Platform	Citizeninvestor: http://www.citizeninvestor.com/project/somerville-mobile-farmers-market
Project type	Civic
Successful	Y
Ask / raised	3,240 / 3,240 USD
#backer	62
Social media and websites	FB https://www.facebook.com/shapeupsomerville
	Tw https://twitter.com/shapeupsville
	Website http://www.somervillema.gov/departments/health/sus
23. Sprint for Shakespeare	
Platform	No designated platform: http://shakespeare.bodleian.ox.ac.uk
Project type	Arts
Successful	Y
Ask / raised	20,000 / 20,000 GBP
#backer	1,000
Social media and websites	Blog http://shakespeare.bodleian.ox.ac.uk/blog/
	FB https://www.facebook.com/bodleianlibraries
	Tw Personal page
24. Stevenson Square	
Platform	Spacehive: https://www.spacehive.com/stevensonsquaregreenmakeover
Project type	Civic
Successful	Y
Ask / raised	39,211 / 39,170 GBP (due to in-kind donations more than the ask was raised)

Creator interviews (n = 28) featured in research through semi-structured interviews	
#backer	77
Social media and websites	FB https://www.facebook.com/RedRoseForest/
	Tw https://twitter.com/redroseforest
	Website http://www.redroseforest.co.uk
25. Surviving on the Savanna	
Platform	Experiment: https://experiment.com/projects/surviving-on-the-savanna-how-do-traits-predict-tree-success
Project type	Research
Successful	Y
Ask / raised	3,000 / 3,170 USD
#backer	32
Social media and websites	FB Personal page
	Tw https://twitter.com/kealasc
26. Touchkeys	
Platform	Kickstarter: https://www.kickstarter.com/projects/instrumentslab/touchkeys-multi-touch-musical-keyboard
Project type	New product
Successful	Y
Ask / raised	30,000 / 46,682 GBP
#backer	198
Social media and websites	FB https://www.facebook.com/Touchkeys-Multi-Touch-Keyboards-326325434169118/
	Google group https://groups.google.com/forum/#!forum/touchkeys
	Tw https://twitter.com/instrumentslab

Appendix 1: Semi-structured interview project details

Creator interviews (n = 28) featured in research through semi-structured interviews	
	Y https://www.youtube.com/channel/UCad1IRAVR2klHEtNoS4TsaA
27.XOAB	
Platform	Kickstarter: https://www.kickstarter.com/projects/ricklevine/xoab-socks-done-right
Project type	New product
Successful	Y
Ask / raised	30,000 / 98,895 USD
#backer	1,220
Social media and websites	FB https://www.facebook.com/xoabsocks
	P
	Tw https://twitter.com/xoabsocks
	Y https://www.youtube.com/watch?v=sAvIEBNyUJA
	V https://vimeo.com/xoab
	Website https://www.xoab.us
28.You Should Totally Meet *semi-structured interview AND project monitoring	
Platform	Indiegogo: https://www.indiegogo.com/projects/you-should-totally-meet-the-mobile-app-that-makes-online-dating-social
Project type	New product
Successful	N
Ask / raised	25,000 / 12,786 CAD
#backer	94
Social media and websites	FB https://apps.facebook.com/You-Should-Totally-Meet/
	Tw https://twitter.com/TotallyMeet
	Y https://www.youtube.com/user/You-Should-Totally-Meet

Appendix 2: Monitored project details

Social media abbreviations as used throughout the appendices	
G+	Google+
FB	Facebook
I	Instagram
P	Pinterest
Tu	Tumblr
Tw	Twitter
V	Vimeo
Y	YouTube

Projects monitored (n = 4) featured in research through semi-structured interviews	
1. Canary in a Coal Mine	
Platform	Kickstarter: https://www.kickstarter.com/projects/959776320/canary-in-a-coal-mine
Project type	Arts
Successful	Y
Ask / raised	50,000 / 212,962 USD
#backer	2,593
Social media and websites	FB https://www.facebook.com/canaryfilm/
	G+ https://plus.google.com/+canaryinacoalminefilm
	Tu http://canaryfilm.tumblr.com

Appendix 2: Monitored project details

Projects monitored (n = 4) featured in research through semi-structured interviews	
	Tw https://twitter.com/canaryfilm?lang=en-gb
	Y https://www.youtube.com/channel/UC6qt7dyl4F_MXMpHHPJtlw
	Website http://www.canaryinacoalminefilm.com
2. Defying Dementia	
Platform	Just Giving: http://www.justgiving.com/defyingdementia
Project type	Research
Successful	N
Ask / raised	80,000 / 52,960.16 GBP
#backer	320
Social media and websites	FB https://www.facebook.com/DefyingDementia/
	Tw https://twitter.com/defydementialu
	Y https://www.youtube.com/channel/UCPUYmu8xJNjL43s34Svn2w
	Website http://www.lancaster.ac.uk/defyingdementia/
3. Reactive Grip	
Platform	Kickstarter: https://www.kickstarter.com/projects/tacticalhaptics/reactive-griptm-touch-feedback-for-vr-and-video-ga
Project type	New product
Successful	N
Ask / raised	175,000 / 89,766 USD
#backer	497

Projects monitored (n = 4) featured in research through semi-structured interviews	
Social media and websites	Blog http://tacticalhaptics.com/blog
	FB https://www.facebook.com/TacticalHaptics
	Tw https://twitter.com/TacticalHaptics
	Y https://www.youtube.com/user/TacticalHaptics
	Website http://tacticalhaptics.com
4. You Should Totally Meet	
Platform	Indiegogo: https://www.indiegogo.com/projects/you-should-totally-meet-the-mobile-app-that-makes-online-dating-social
Project type	New product
Successful	N
Ask / raised	25,000 / 12,786
#backer	94
Social media and websites	FB https://apps.facebook.com/You Should Totally Meet/
	Tw https://twitter.com/TotallyMeet
	Y https://www.youtube.com/user/You Should Totally Meet

Appendix 3: Semi-structured interview protocol (creators)

The following list of questions is not exhaustive, but is representative of questions asked during semi-structured interviews with project creators:

- Tell me about your project, how did your project come about?
- How did you first learn about crowdfunding?
- Did you consider other funding channels?
- What made you choose crowdfunding for your project(s)?
- Which crowdfunding platform did you use?
 - How did you decide on that particular crowdfunding platform?
 - Was the platform easy to use? Tell me about what you liked/did not like?
 - Which platform feature did you use the most?
 - Where did you interact most with backers?
 - Did you ask the platform for help with anything? Did you make use of any platform supports (e.g., online help, platform community manager)?
 - Were there any elements that you wish the site had, but didn't?
 - How do you decide on the incentives / non-financial rewards to extend to your funders?
- How did you learn how to set up your crowdfunding project?
 - Did you look to other crowdfunding projects? (on the same platform, on others)
 - Have you backed other crowdfunding projects?
 - Did you communicate with other creators? (online, offline)
 - If yes, how were these creators identified?
 - How long did you prepare for the crowdfunding project?
 - What was the "pre-launch" schedule and workload?
- For a future campaign, would you do things similarly?
- Did you have an identified audience who you were targeting for funding?
 - If yes, how was this group identified?
 - If no, who were you anticipating would fund your project?
- Where (online, offline) beyond the crowdfunding platform did you publicise your project?
 - How successful was this?
 - Who was involved with this?
 - How did you know to do this?

- Why did you choose the sites you did?
 - Which were most successful? Why?
- Have there been any challenges to crowdfunding?
- Have there been any unanticipated surprises (positive or negative)?
- Are there any particularly active people on your crowdfunding project?
 - Do you personally know the most active funders to your project?
 - When was there the most project activity on your project?
- What was your project audience like pre-crowdfunding? Post-crowdfunding?
- (If project completed) Did you reach your financial minimum?
 - If yes, why do you think the project was financially successful?
 - If no, why do you think the project wasn't financially successful?
- (If project completed) how regularly do you revisit your project site on the crowdfunding platform?
- What are your short-term and longer-term hopes for your project? How does crowdfunding fit with, or help address, these aims?
- Would you crowdfund again?
- Is there anything else that you'd like to tell me about crowdfunding and your experiences?